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YOGA

EXERCISES FOR HEALTH & CURE

(THIRD EDITION)

BY

S. MUZUMDAR

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To the Memory of

J A Y A N T A

AUTHOR'S NOTE

The basis of this book is a series of articles in "The Sunday Statesman". These attracted considerable attention, and it was suggested to me that they would be equally popular if amplified and published as a book. I have therefore revised and in parts rewritten them, and the present volume is the result.

I am grateful to all those friends in India and abroad who have corresponded with me and reported their personal reactions to the exercises outlined here. I sincerely hope this little book will be of service to the general public, and shall be glad to advise any reader writing to me and enclosing a postage stamp for an answer.

I thank Pandit Sitladin Tripathi for posing for the illustrations, and Mr. E. M. Groth for allowing me to use some pictures made by him. I have also to thank Mr. Ashoka Gupta for making a number of pictures for me.

"Emotional Background of Health and Yoga" appeared in "The Orient Illustrated Weekly", and "A Short Yogic Course for Women" in "The Leader".

S. M.

*"Silveroaks",
Luker Road,
Allahabad.
20th February, 1941.*

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INTRODUCTION

Until twelve years ago I used to laugh at yogic exercises as I had a flaming faith in combative athletics, huge muscles and superhuman physical strength. To me yogic exercises were then mere stunts of the Indian ascetics, whom a resident of Allahabad sees so much of during the Kumbh and Magh Melas. Prior to my contact with yoga I experimented with various modes of physical culture, mostly European ; I introduced some new ones to this country and looked to Europe for a perfect system which one could pursue all his life. But I had to wait till middle-age to realise that most systems of physical culture were for the vigorous young ; there was nothing which could adequately meet the needs of the altered life beyond thirty-five. I was drifting from strength-athletics to medical gymnastics when an American friend, Mr. Wright, took me to task for my deep faith in and enthusiasm for Western modes and utter neglect of yogic exercise. He very kindly lent me his volumes of Swami Kuvalayananda's "Yoga Mimansa",

Almost simultaneously with this event Pandit Jawaharlal Nehru advised me one day to visit Kuvalayanandaji's school and study the ancient science. Jawaharlalji had just taken lessons from that great yogic scientist. That was a turning point in my life as a student of physical culture. Then came Tripathi, my teacher and present model ; he taught me the Asanas. But yet I had to wait to be more thoroughly convinced.

In 1930 I became seriously ill with gastritis and suffered from it acutely for more than a year. It was a reign of medicine bottles, injections, unbearable pain and despair. The illness became chronic. During one evening of respite from pain it suddenly flashed into my mind that perhaps my last hope lay in yoga. Forthwith I tried Sarvangasana, the claims of which I had taken before as unbelievable and preposterous. But since then

I have never suffered from gastritis, although none of my friends suffering from it is a whole man to-day. Gastritis had made me a bag of bones ; soon I combined with Hathayoga exercises my usual favourites, weight-lifting and a bit of amateurish boxing. In another year I completely regained my original health and strength.

As I went on studying this science I carried on experiments and came by many successes. I must make it absolutely clear that I am a physical culturist, and as such I have searched for a perfect system of what should pass as medical gymnastics for the weak and the sufferer from chronic organic troubles, and for a system, I repeat, which could be made available when youthful modes became unsuited. I have never tried to delve into the mysticism of yoga. Further, being a mental worker myself I realised the need for something which maintained perfect physiological balance and promoted mental hygiene. The need of the latter, especially, is hardly ever realised until one reaches the more serious part of life and until youthful values begin to change. Hathayoga fulfilled all these needs.

I do not decry muscular and strength exercises, and yet I have a great faith in combative athletics. Without them one never knows what he is capable of, and never realises the supreme luxury of strength and self-confidence. But these forms, on account of the combative element in them, do not prevent frayed nerves, and are not always processes of conserving nervous energy. Besides, I have known super-athletes suffering from chronic digestive troubles. It seems to be inevitable as one has to eat such a lot, and a varied lot at that, to meet the excessive fuel demands of heavy athletics and exacting games.

One is healthy and strong in youth because of the amazing state of blessedness that youth is. I should call that person healthy and strong who is so beyond forty. I repeatedly mention that age because I do have Fortyphobia. Nature seems to throw us away as useless rags at that crucial age. There is evidence galore that Hathayoga

smooths over middle-age difficulties, and if followed with due care and caution it promises a new vigorous lease of life, and particularly so to women, who, on account of their more delicate physical nature, have comparatively more difficulties to contend with. Like other yogic exponents I have experience of health miracles happening through this ancient system.

The eminent biologist, Dr. Alexis Carrel, believes that every man can increase the span of his life by at least ten years by rational living. He doesn't seem to know of Hathayoga which brings such an objective within reach—and something more than that. Dr. Carrel also takes longevity as a curse, if by longevity we mean the prolongation of a helpless and feeble old age. The true interpretation of longevity is different. A long life is worthwhile if youth is prolonged, and it is ideal if youth is prolonged indefinitely. Indian yogis, considered quite apart from their supernatural and spiritual powers, have been known to enjoy unlimited youth in terms of health of the nervous system, perfect physiological balance, and elasticity and mobility of the bony-joints. When the Sanskrit source books of yoga talk of a deathless existence we can take them as hinting at everlasting youth and all that it may mean within one's span of life. The evidence is not at all wanting that Hathayoga tends to achieve all these things.

If I have studied this and allied subjects extensively, I have used, besides "Hathayoga Pradipika" and "Gheranda Samhita", the Sanskrit source books, Kuvalayanandaji's "Yoga Mimansa" as my mainstay, in fact I am saturated with his amazing exposition of this science; others hardly provide a scientific insight into and explanation of yoga therapeutics. My only justification in writing this book is that I have had the exceptional advantage of first-hand knowledge of most forms of athletics and games, and the modern science of physical culture, both indigenous and foreign; my body has experienced all their effects. And to that I have applied some knowledge of the science of sex which

has a great bearing upon the health and mental hygiene of man. Kuvalayanandaji's erudite writings have the sombre atmosphere of the laboratory and the clinic. I have approached the subject from a different angle and have tried to adapt it to modern life and make it a thing of universal utility. I have a firm conviction that yoga is the physical culture form of the future world; if modern scientific opinion is right in advocating moderation in exercise and in fighting the dissipation of physical energy caused by competitive athletics, the yogic system will soon come to be accepted as the ideal, so it must be simply and logically presented.

If some Indian writers on yoga have been unable to free themselves from undue sentiment and are guilty of many misinterpretations of the mechanism of the postural aspects, some European writers are much more to be blamed. One English writer guilty of explaining incompletely a dangerous Mudra wrote in a British journal that the Sanskrit source books are verbose—"words, words and words, and prayers to Shiva"—which is far from the truth and speaks of his complete ignorance of them. Another writer accused the Asanas of promoting immobility, though in fact the mobility and elasticity of the bony-joints promoted by the Asanas defy acrobatics and are amazing. With his incomplete visual and personal knowledge of yoga and his characteristic interpretation of mobility as something combined with rapid successive movements and speed, such a writer is liable to make this great error. That yogic mobility beats the other variety of it in the long run can be proved by medical scrutiny and by the suppleness of yogic students in advanced age.

I may hazard the opinion that these Asanas inculcate in the mind of the serious student a spirit of reverence. Very soon one has a feeling of elevation, as if one is making a passage to a serious and important phase of life. According to my own varied experience, no other form of physical culture is associated with such a deep feeling. It is soon realised that the Asanas make

for the growth of Individualism, even though we reject the instructions of "Gheranda Samhita" for promoting it consciously. This I consider to be one of the many outstanding virtues of Hathayoga, and for this particular reason I have hated the sight of the Asanas used by drilling squads. Both in its physical culture and therapeutic aspects yoga must remain individualistic to be of the greatest value to the student. I do not think that the Asanas should lend themselves to group activity. The yogic student is out to make peace with his bodily functions, emotions and the exigencies of life; display of the Asanas should never be his business.

I have not wasted words and print over descriptions of anatomy and physiology beyond what has been incidental and unavoidable. The inquisitive student who wants them is referred to acknowledged text books and to "Yoga Mimansa"—the latter especially for a very serious study. But unlike other health writers I have tried to explain briefly the intimate relation of the emotions to health. Health is purely a matter of one's mental attitude, and it is the more so from middle age onwards. Unless the emotions are brought under reasonable control, exercising is sheer waste of time and of valuable nervous energy. Fortunately, however, yoga teaches us by slow but sure steps to harmonise our emotional nature, and the benefit of the Asanas becomes infinitely greater when there is a conscious endeavour on the part of the student to control the emotions.

There was a time when lay people used to be much afraid of the Asanas, but since Kuvalayanandaji recorded the pressural changes brought about in the exerciser by many of the major exercises and specified the particular limitations of each exercise after years of experiment and collection of clinical evidence, the Asanas have become absolutely safe for anyone of average health, at least far safer than diving and swimming under water, the most dangerous of sports and exercises. If one has a strict eye to the limitations, and adjusts the exercises according to them there is no risk whatsoever.

I make bold to clear a further point. It is a substantial claim of yogic exercises that they effect rejuvenation to a great extent. Sex has become a great problem to many of my correspondents who have followed me. It should not be something bewildering. It is possible to sublimate this prime energy by the very Asanas which invigorate it; canalisation of this energy is a lesser affair and a pure matter of one's conscious effort. But those who do not seek either sublimation or canalisation would come by no harm through its reasonable and normal use. But what is this normal? Leaders of various religions of the world have tried to set a standard thereof but apparently with very little success. Havelock Ellis, Forel and others, in fact almost all the renowned sexologists, have come to the conclusion that it is after all a matter of pure individual capacity and expression; what is food for one becomes poison for another, so no standard can be set, but it should be well under control to be used as motive power of all the energetic expressions of life.

Yoga has admittedly been surrounded by a spirit of asceticism. Great writers on yoga may disagree, but it will be foolish not to take into account modern human behaviour when we are adapting yoga to modern needs and bringing it out of the exclusiveness of ascetic practice. Hindu thinkers have recognised two kinds of Brahmacharya or sexual regulation, of which strict celibacy, the ascetic variety, has always been considered the more prized current coin, just because of the influence of the ascetics all over the world until the end of the Middle Ages, an influence that persists in the orthodox section of our own population. Young ideas hardly die old even when the social order is changed. Sex is profoundly a matter of health, and volumes can be written on this very debatable subject, but for our present purposes this passing reference to it ought to suffice.

I have described in this book only what seemed to be the most utilitarian exercises, and rejected those which disclose even the

slightest risk to the exerciser, and they are few. Perhaps I have made a departure from orthodox ideas; if I have, it is but inevitable as my appreciation of the subject has been different.

I have added for its great efficacy a new posture of relaxation to Shavasana, the orthodox yogic posture, and this may be used as a variation. We understand very little of this important question of relaxation, but a day will soon come when this will receive as much care as exercise has received so far, and a separate science of relaxation will spring up

I beg my readers to pardon me for making frequent personal references. In the matter of health and physical culture personal realisations and reactions are of some value and provide some convincing proofs to other health seekers.

The best advice that can be given about these exercises is age-old, and that advice is: MAKE HASTE SLOWLY.

IMPORTANT

Go ahead confidently with these exercises if you enjoy good health and are organically sound, and if you have the requisite food to eat. I insist that no man or woman should take to exercising who cannot have enough protective foods.

The schemes of exercises given at the end of the book are recommended. The rest of the exercises are to be used as variations or to enlarge individual schemes.

But the weak and the ailing would be well advised to undergo a medical examination and check their defects in the light of the limitations pointed out in the various exercises. They should preferably be guided by a yogic expert. One should not be impulsive and make experiments with contra-indicated exercises till his defects have been removed and he is made stronger. Defective and weak people should devote some time, say a fortnight or a month, to walking to bring themselves to a suitable physical condition before beginning the Asanas.

Convalescence from any illness should be followed by walking for a few days to re-condition the body before the exercises are resumed. Under no circumstances should the Asanas be practised directly after an illness—major or minor.

Female students suffering from chlorosis are specially warned that until medically advised they should not take to these exercises. A long period of rest should be followed by days of walking before the Asanas can be practised.

Although many European physical culture scientists advise moderate exercise for a woman during her days of "temporary illness" female Asana students should be advised to take complete rest and refrain from all exercises in that period.

Avoid fatigue. All exercises and physical activity are contra-indicated when the body is in a fatigued condition. The only Asana that is recommended in such a case is Shavasana, the yogic posture of relaxation.

People habitually recording blood pressure any higher than 150 mm. Hg. or lower than 100 mm. Hg. are absolutely debarred from these Asanas.

Beginners should never lose sight of the limitations to the exercises mentioned in this book.

PADMASANA: THE LOTUS

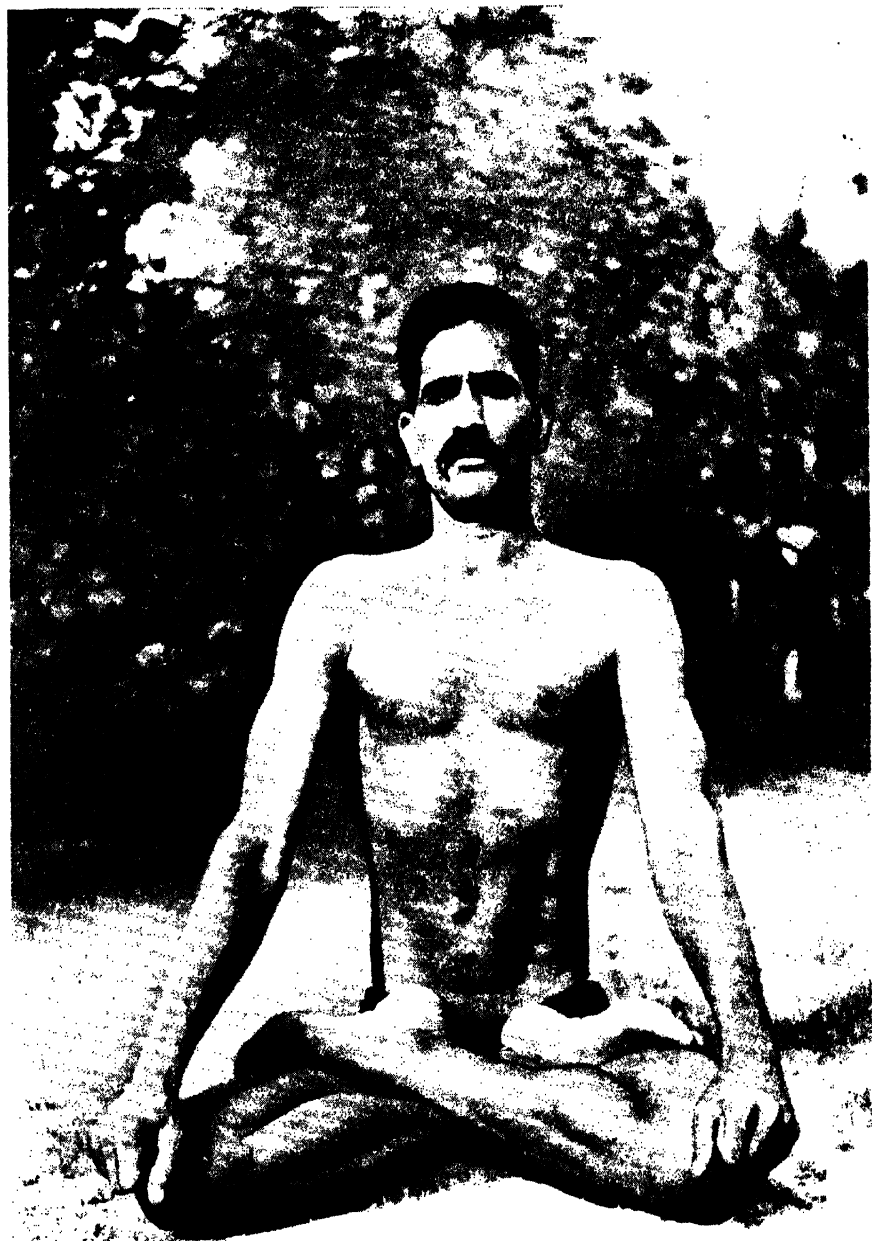
Although this famous Padmasana forms the basis of many yogic postures its cultural value is less than the meditative value attributed to it. Further, the complete Padmasana calls for the application of two bandhas or locks known as Jalandhara Bandha or the chin-lock, and Mula Bandha or the anal lock. The latter bandha forms the most difficult part of the whole affair and is not without grave risks. I intend dealing here with the former lock, the more generally practised of the two.

"The Lotus"

Padmasana acquires its name because it is said to resemble a lotus, possibly on account of the position of the feet. Some people describe it also as Kamalasana, which is the same thing as Padmasana, kamala being the Sanskrit synonym of padma. But the Sanskrit source books stick to the first name.

Sit on the floor with the legs extended. Fold the right leg and place the right foot on the top of the left leg so that the right heel is placed against the left groin. The other leg is similarly folded and placed in a corresponding position on the right. The heels now occupy a position against the pelvic bone and they press against the adjacent part of the abdomen.

According to Kuvalayananda, the left hand is now placed on the heel with the palm up and open and the right hand is placed similarly on the left. This is, of course the position of prayer. Two source books, "Hathayoga Pradipika" and "Gheranda Samhita," enjoin that the arms should be crossed on the back and the toes held with the hands, the right with the right and the left with the left. In the popular list of postures this original pose is named Baddha Padmasana, a variation of Padmasana. One's gaze should be fixed on the tip of the nose.



PADMASANA, basis of many yogic postures.

Jalandhara Bandha

This bandha constitutes the most important part of Padmasana. Students should first master it independently of the main Asana. In Jalandhara Bandha, the chin is tightly pressed against the chest. The neck and the head are bent forward and the chin is set against the jugular notch. Some press the chin further down against the chest.

Jalandhara Bandha pulls the spine upwards and the spinal cord is said to be involved in the action. Jala refers to the brain. Very possibly the brain and the nerves passing through the neck are exercised by this inoffensive-looking lock.

The ordinary Padmasana will promote a rich supply of blood in the pelvic region and tone up the coccygeal and sacral nerves. I have witnessed the cure of stiff knees and the re-strengthening of a knee affected by synovitis through Padmasana. The Lotus can be retained for a long time but throughout the pose the spine should be held erect.

SIRSASANA: THE HEAD STAND

Technique

Kneel on the ground and sit on your heels. Stooping forward place the forearms on the ground and firmly interlock your fingers, the forearms thus forming an angle. For the sake of convenience a soft cushion can be placed under the forearms to rest the head. Now, place your head close to the interlocked hands. Be careful to place the top of the head on the cushion, as this is essential for keeping the spinal column straight in an inverted position, which is a fundamental part of this exercise. The spine must be perfectly erect; if the front part of the cranium is placed on the ground instead, it will induce a curve in the cervical section of the spinal column, which is not desirable.

You have now got into the initial position. Raise the body forwards softly pushing against the ground with your feet till the whole of the upper part of the body—from the head to the buttocks—is in the erect position. When this has been carefully assumed draw in your legs towards your body till the toes are before your eyes. This constitutes the first part as far as the balancing of the body is concerned.

When this preliminary balancing is effected, educate your body in further balancing by raising the thighs, which should in time be brought into a straight line with the buttocks. In this new attempt the lower legs should hang down from the knees until the balancing is properly mastered. When this is done stretch your legs fully above, so that the body—from the head to the heels—is one perfect straight line.

Go Slow!

It will be unwise to get into the final position, as illustrated here, all at once either by jerking yourself up against a wall, or employing another person to hold you in that position. These are not the proper ways of acquiring the necessary balance of the body.



SIRSASANA : The main pose.



SIRSASANA : (Left) Variation IV ; (Right) Variation V.

This inverted position of the body should not be discouraging. You will feel as safe in it as you are on your feet, and with increasing practice you ought not to feel that you are carrying any heavy load on the head.

This is not an acrobatic exercise to be done in jerks and with vehement muscular efforts. The whole thing is to be done as smoothly and quietly as possible. During the practice of the first part of the exercise the accessory muscles will be properly strengthened for the adequate support of the body in this new position.

At the start the pose is to be maintained for fifteen seconds, and the period of performance should be increased cautiously and progressively when you have made sure that no untoward reactions are taking place. The maximum period of performance should not exceed twenty-four minutes if this single exercise is your whole exercising scheme. If performed with other yogic or muscular exercises the longest period devoted to it should be about twelve minutes. Any stiffness of the neck caused by Sirsasana can be allayed by a few turns of Matsyasana.

Variations of Sirsasana

For all the variations the original legs-up posture is to be used as the base. One variation consists of bending the legs in the way you fold them to get into a squatting posture. Now, bend the right leg at the knee and fold it up on the left thigh so that the right heel lies at the root of the left thigh with the sole of the right foot turning outwards to the left. To facilitate this position of the right foot it can be placed anywhere against the left thigh, at the start, and slipped down to the final position. While changing the position of the leg thus it will be advisable to transfer the balance of the erect body a little towards the front. With this little adjustment the muscles of the back will counteract a toppling-over. Now, place the left leg in similar fashion when the position of the right and the required balance are secured. (See the illustration of Variation IV).

For the second variation the above folded position of the legs is maintained for some time. Now, fold the body at the hip-joints and slide down the leg-lock in such a manner

that the knees touch against the arm-pits. This is done by vigorously contracting the abdominal muscles and stretching the back muscles and the spinal column. It is needless to say that success in doing this will depend upon the elasticity of the spine. (See the illustration of Variation V).

A further variation is reached when the trunk is flexed upon the arms. The leg-lock is still resting against the arm-pits but the body is lowered as far down as the shoulder joints will allow it to go. The whole body is now folded at every joint. The whole of the spine and the back form a huge curve and the abdomen is concaved. The abdominal muscles experience a vigorous contraction.

This splendid exercise stimulates by effecting a richer supply of arterial blood in the brain and the nervous system. It affects very beneficially the different nerve centres in the brain of the senses of sight, smell, hearing and taste. These sensory organs become healthy and function in a better manner.

Sirsasana promotes the health of some of the most important endocrine glands ; the pineal gland and the pituitary body receive the largest benefits from it. Its effect on the thyroid and the parathyroid is, however, not so great. It also promotes the health of the digestive system and the excretory apparatus.

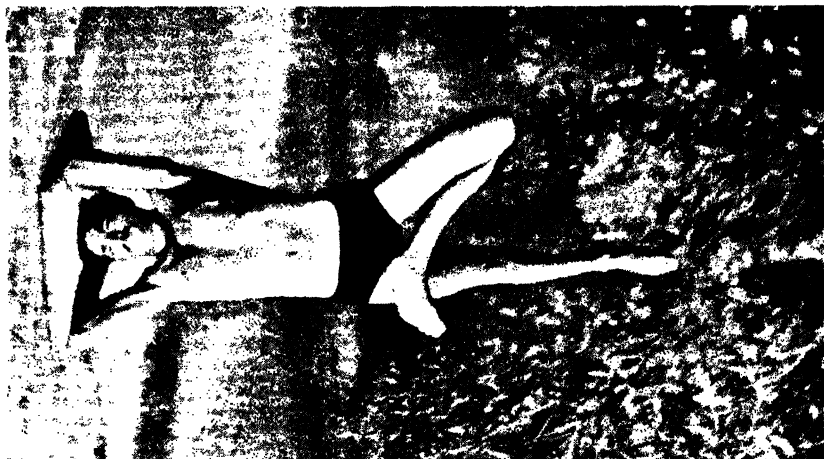
Sirsasana can be practised by any person possessing average good health. But it is contra-indicated in the following cases:—

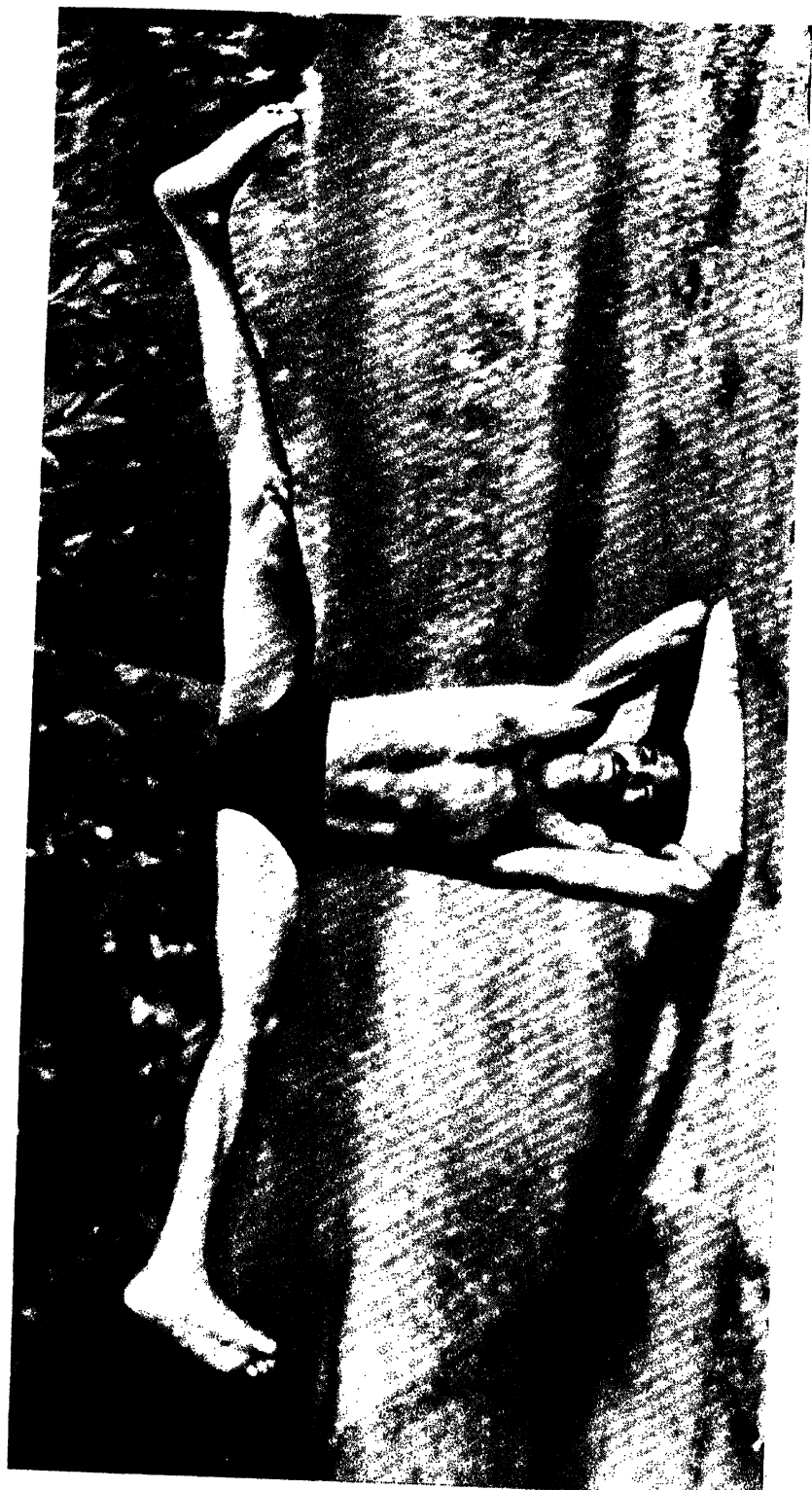
1. Aching and running ears. The exercise can be taken up only when these troubles have been non-existent for some time.

2. Weak eye capillaries. The exercise is permissible after the capillaries have been properly strengthened by other methods, natural or medical.

3. Where there is a steady blood pressure above 150 or below 100 mm. Hg.

4. Cardiac troubles or weak heart.





SIRSASANA : Variation I (The pose explains itself).

5. Chronic nasal catarrh. But in its initial stage nasal catarrh is effectively controlled by Sirsasana.

6. Acute constipation in which the stools have become excessively dry.

Advantages

Claims are made on behalf of Sirsasana that it will cure perfectly the following maladies:—

1. Neurasthenia: This is caused by the degeneration of the nerves, and expresses itself in symptoms such as lack of energy, a sense of fulness and pressure in the head, easy fatigue, dullness, failure of memory, insomnia, dyspepsia and constipation. Sirsasana stimulates the brain and ensures greater health of the nervous system and eradicates the above diseases in due course.

2. Dyspepsia and Constipation: These are due to disorder of the digestive system. All the inverted yogic poses like Sirsasana set up a richer blood supply in the digestive organs and re-establish their health. Sirsasana corrects any defects in the digestive organs due to either defective blood circulation or the degeneration of the nervous mechanism.

3. Congested Throat: One of the main functions of all the inverted yogic poses is to keep the respiratory passage clear. Though no such pose will cure adenoids, polypus or chronic nasal catarrh, Sarvangasana is expected to cure tonsillitis, and Sirsasana cures congested throat, especially when it is due to dyspepsia.

4. Congested Liver and Spleen: These may become congested through many causes. By establishing a free blood circulation in these organs Sirsasana re-establishes their health.

5. Visceroptosis: This is the sagging forward of the abdomen due to weakness of the abdominal muscles. In this the abdominal viscera have a tendency to droop into the pelvic region and give rise to constipation. Sirsasana will effectively combat such a condition.

6. Hernia: It will cure this disease in the initial stage, and can keep it under control even when in an established

condition. The source books say that to cure hernia in the established stage certain modifications of the exercise are necessary, for which an expert must be consulted.

7. Asthma.

8. Varicose Veins: As this disease is a very common one I refer to one of the source books. "Out of all the organs of blood circulation the veins are the weakest, and yet they have to collect the blood from nearly the whole of the human body and raise it to the heart against the force of gravity. It is this uphill task that puts a very heavy strain on the weak structure of the veins and is responsible for such troubles as varicose veins. It is, therefore the veins that stand in greater need of external help for preserving their health than any other part of the circulatory system. Yogic seers have found out a very easy way of helping these veins. They have invented Sirsasana, Sarvangasana and Viparita Karani in which, because of the upside-down position of the body, the veins are enabled to drain themselves into the heart without the least exertion on their part. The veins are substantially relieved from the pressure of the blood flowing through them. The result is wonderful. The short relief that the veins get because of the Asanas is so effective in preserving and even restoring the health of the veins, that patients suffering from varicose veins can get over their troubles by practising these Asanas for a few minutes a day."

(2)



SARVANGASANA : The completed pose. Inset is an illustration of the first stage

SARVANGASANA: THE SHOULDER STAND

The posture is called Sarvangasana in Sanskrit, which has been translated as the Pan-physical pose. Popularly it is known as the shoulder stand. It is one of the greatest exercises planned by human intelligence. Further it is fairly easy of performance, and any one whose spinal column is not hopelessly stiff can come into the posture at once, and those with a stiff spine can coax it into sufficient pliability with this exercise in an incredibly quick time. The Swedish variation of it is called the "Candle".

Technique

The technique of the exercise is like this : Lie on your back with the body fully stretched and the arms at the sides. Relax yourself in this position and breathe normally. Now raise the legs together keeping the knees perfectly straight, and as soon as the hips have left the ground place your palms against them in support.

The upward movement of the legs should continue and in this the hands should assist by pushing the hips mildly. As the trunk comes into an erect position the hands slide down, and when the body is completely inverted and resting upon the back of the neck and shoulders they come even lower down and serve as props to keep the body in the desired position.

The next important thing to do is to tuck in the chin against the part of the chest just above which the collar bones meet.

When the exercise is well under control you will be required to take away the hands from the waist and extend them on the ground. This is to be done only for a part of the time devoted to the posture.

For the greater part they should remain as directed in the first stage.

Retain the pose without the slightest movement for a minute to begin with. If you are very weak let it be for thirty seconds only. And concentrate your mind on the thyroids. The pose must be attained without straining yourself in any manner and unhurriedly, and the original lying position regained in a similar fashion. Yoga abhors violence, hurry and strain. It will pay you to remember this.

It will be advisable for you to keep to this brief period of time for the first two weeks, and then increase the duration of the exercise by a minute each week till twenty minutes are reached.

Variations

There are some adepts who add many variations to this exercise. The advanced student of yoga who has strengthened his body thoroughly may adopt those variations. These are identical, as in Sirsasana, and consist of (i) fore and aft splitting of the legs, (ii) sideways splitting, and (iii) effecting the Lotus while the shoulder stand is maintained and twisting it downwards. See the Sirsasana variations which are the same for this exercise.

A sense of well-being will come to you after about eight minutes, but the fullest benefit of the exercise is derived when you are capable of doing it for the maximum period. All yogic exercises should be preferably done in the evenings.

Benefits

1. The chin-lock diverts the flow of blood into the thyroid glands and promotes their health. Healthy thyroids mean health of the body.

2. Sarvangasana removes congestion of the liver and the spleen and reclaims them to health.

3. It removes constipation.

4. It will cure piles, both internal and external.

5. It will strengthen the spinal nerves.

6. It will cure visceroptosis, or the sagging of the organs of the abdominal viscera.

7. It will eliminate dyspepsia.

8. It will arrest and cure appendicitis if practised before the stage of suppuration is reached.

9. It will cure loss of manhood and make for virility.

10. It will put back the male glands to normal health and weight when they are degenerated or atrophied or enlarged through sexual excesses.

11. It will tone up the body when the general tone has been lost owing to the reason stated above.

12. It will cure varicose veins and varicocele.

13. In a woman it will correct ovarian insufficiency.

14. It will remove difficulties from her periodic function and make it regular and normal.

15. It will reclaim her health impaired through frequent pregnancies and child-bearing.

16. It will cure tonsilitis in men and women in general, and in particular in girls suffering from it during pubertal disturbances.

17. It will cure varicose veins in women as a residue of pregnancy.

18. It will cure hernia.

The Pan-physical pose is a powerful rejuvenator. It makes for sex-health and simultaneously is a process of sex-sublimation. Not a claim given above is unsupported by clinical evidence.

Limitation

The posture is, however, not available to people suffering from a weak heart or chronic cardiac troubles.

MATSYASANA: THE FISH

Sarvangasana has a complementary exercise which is practised after it to enhance all the therapeutical advantages attributed thereto. This exercise is known as Matsyasana or the Fish Pose, because in this Asana, and helped by what is known as Plavini Pranayam—a particular way of yogic breathing—adepts were able to float on water. This is mentioned to trace the origin of the name only ; we are only concerned with the therapeutical values of this purposive exercise.

The initial stage is for the student to sit in the yogic "leg-lock" known as Padmasana, a feat in itself for people unused to it and also for fat persons. But with a little perseverance it is not at all difficult to get used to this pose when the accessory muscles are stretched and trained for the purpose.

As it is necessary to bridge the trunk in this exercise spread a thick carpet or a couple of blankets on the floor. Sit on the carpet with the legs fully stretched out together, and the hands resting on the floor on either side of the thigh. Bend the right leg at the knee and place it on the left thigh, the right foot being placed on the top of it ; the sole of the foot will thus be turned upwards. Place the left foot, like the right, on the right thigh. The heels, if properly adjusted, will press against the abdomen. It goes without saying that the hands are to be used to place the feet in position. This is the proper leg-lock necessary for the exercise.

Fat persons or persons with over-developed legs will do better simply to squat on the floor in the Indian style with the legs conveniently folded upon each other, because for them the strain of the leg-lock will be most difficult to overcome, even if they get into the pose somehow or other. It will, therefore, be advisable to learn the leg-lock by stages ; coaxing the accessory muscles over a reasonable period.

3)



The Arched Body

When the leg-lock has been effected lie on your back. Now, place the elbows on the carpet to support the weight of the trunk raised in an arch. As you raise the body slide your head in, bending the neck, backwards. The top of the head should be pressed against the carpet. Between the head and the hips the body is now in an arch, somewhat similar to a wrestler's bridge in European style of wrestling. Now stretch your arms forward and hold the nearest toes with the fingers of either hand. This position of the arms will enable you to maintain the posture. There is another school of yogis who like to place the folded arms around the head instead of stretching them forward. I should prefer the former style as it gives you a greater control of the exercise and better muscular effect.

This exercise is to be done next to Sarvangasana. In Sarvangasana the cervical portion of the spinal column is bent forward and the long period the pose is generally maintained for gives one cramped and aching muscles. In Matsyasana the spinal column is bent the opposite way and it at once removes all muscular stiffness due to the practice of Sarvangasana. It is recommended that the time devoted to Matsyasana should be only three-tenths of the time given to the principal exercise, Sarvangasana.

Advantages

Matsyasana induces deep breathing. The cervical and dorsal nerves are stimulated. It is said that the pituitary and pineal glands are toned up by it.

It removes constipation and brings down all accumulated faecal matter in the intestines into the rectum. It helps in asthma, consumption, and chronic bronchitis besides enhancing the effects of Sarvangasana, as I have noted above. If Uddiyana and Nauli are practised after Matsyasana, the bowels are easily relieved.

Those people who cannot practise the Sarvangasana and who take up Matsyasana as a main exercise should do it for ten seconds only at the beginning. The utmost limit should not exceed ten minutes.

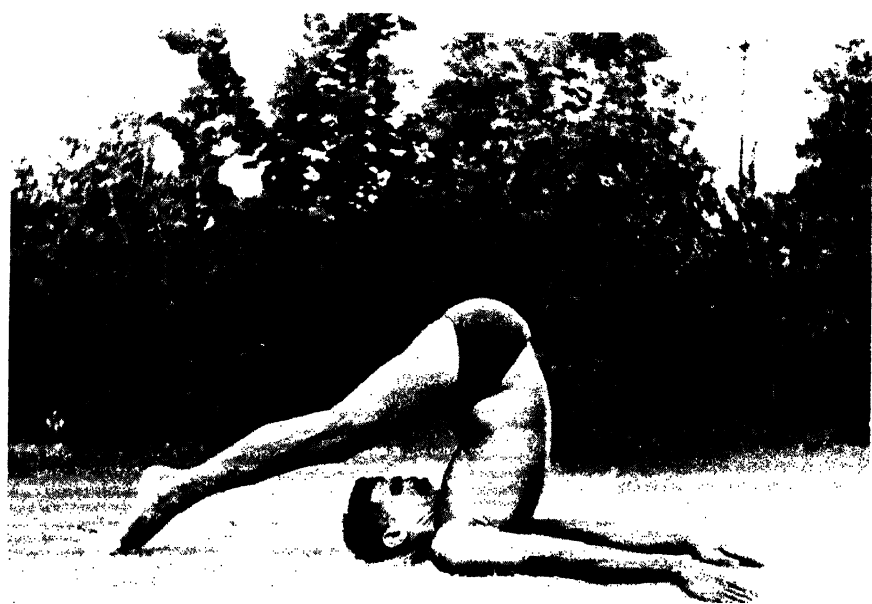
HALASANA: THE PLOUGH

Halasana is an important exercise in the yogic scheme of physical culture. It is so named because the posture assumed in doing it is supposed to resemble a plough, for which Hala is the Sanskrit word. A stage of this exercise is a part of almost all systems of physical culture, and is commonly known in England as "Trunk-rolling-up-backward," but much of its important therapeutic values is not known outside yoga culture.

To do this exercise one has to lie at full stretch on the back with the arms at the sides. The legs are then raised up slowly with perfectly straight knees. Those who have got used to Sarvangasana will be able to continue the movement of the legs so that they turn over the trunk till the toes touch the ground beyond where the head is placed. Needless to say, such a movement is possible when the vertebral column is elastic enough to help it, but when it is not so it will be advisable to do the Asana by stages, that is, to move the legs upward and backward as far as they will go and along with it raise the pelvic part of the body, then the lumbar, and so on, until the toes can be comfortably placed on the ground as directed. Once the toes are placed on the ground it becomes easy to coax even a stiff vertebral column to give in to the demands of the movement. But the novice, especially the middle-aged novice and he whose spine is not quite youthful, must be seriously warned against trying to attain the final posture all at once. He will only injure the rigid muscles of his back by doing so.

Action of the Spine

The mechanism of this exercise involves strong action of the whole of the spine; the abdominal muscles and the erector spinae muscles—that is, the muscles running up like ridges on both sides of the spine must be brought gradually into a fair condition along with the others to stand the stretch.



Having placed the toes beyond the head, the exerciser waits for a couple of seconds when the important stage is reached. He has now only raised the hips and the lower part of the trunk from the ground ; the pressure exerted in the action rests in the lower region of the spine. The arms are held extended, as before, for they play no part in the movement until the last stage.

Now, slide the toes upward and a little farther beyond the head to induce a further curve of the spine and to feel the pressure on the lower dorsal part of the spinal column. Wait a while at this position, and again slide the toes still farther upward. The pressure is now on the upper dorsal part of the spine.

When this position has been secured move up the arms bending them at the elbows, lock the fingers, and place your locked hands against the head and at the same time push your toes farther up to the limit of the space they can thus reach. This posture now exerts the utmost pressure on the shoulders and the neck. The chin adjusts itself tightly against the chest. All these complete the movements in Halasana. Although Halasana is important for its inverted character the source books of yoga do not seem to recognize it as an inverted posture.

The movements for recovering the normal position of the body must be very gradual. Restore the arms to their original position. Slide in the toes to relieve the spinal column, and lastly, bring back the legs to their normal position.

For purposes of physical culture maintain the posture for half-a-minute, regain normal position and repeat the whole movement till you have covered four minutes at the final position. The time indicated is of course the maximum. The novice is to maintain the pose for a few seconds each time until he gets used to the exercise and so reaches the maximum time.

The yoga text books continually refer to the elasticity of the spinal column and, as the aim and object of this culture is to maintain what may be termed eternal youthfulness, I should interpret that as elasticity and pliability of the all-important back-bone. To gain this useful end Halasana is one

of the most efficacious of exercises. It will develop strong abdominal muscles, erector spinae and neck muscles, and will also keep the intercostal muscles in fair condition of health. It develops a healthy thyroid, but as far as this is concerned it is considered inferior to Sarvangasana.

Halasana exerts alternate pressure on the heart muscles, and thus strengthens the heart and improves the blood circulation.

It is claimed that it successfully cures dyspepsia and constipation which may especially be due to a flabby condition of the abdominal muscles and the degeneration of the nervous mechanism of digestion. It should also reduce enlargements of the liver and the spleen, if the enlargements are not too serious. It is supposed to cure particular types of diabetes (details not mentioned in the source books) ; it will also help eradicate flatulence. Systematic practice of this exercise makes one ravenously hungry.

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BHUJANGASANA: THE COBRA

In the well-known yogic pose Bhujangasana—as the name implies—one imitates a cobra reared up on its caudal support and the hood fully expanded. This exercise may be said to be one of the set comprising Dhanurasana, Salabhasana, and Halasana.

The method of performing this exercise is simplicity itself. Lie at full stretch on your face with the arms at the sides. To complete this initial stage let your forehead touch the ground. Now, slide up your hands and let the palms rest on the ground on either side of your chest. This will bend the arms at the elbows. The feet are stretched out with the soles upwards.

The next step is to raise the head and slowly move it backwards as far as it will go, and tilt the chin outwards to help the backward bending of the neck. So long as the head is being moved thus the chest is not brought into play and it rests on the ground as before. But when the head has been thrown completely backward you start contracting the muscles of the back, and these contracted muscles will co-operate with you in your attempt to raise the chest from the ground.

In the preliminary stages of the practice you are allowed to take the assistance of your arms to lift up the chest, just as you would to perform a floor-dip (dund). But when the relative muscular mechanism is rendered sufficiently strong the assistance of the arms is to be eliminated if possible and the muscles only are to be depended upon for this particular action. The arms will, of course, move at the elbow in an angle, but—comparatively—the weight of the upraised trunk is not rested upon them.

Curving the Back

As the result of raising the chest the back begins to curve in, but this curve is not to be induced all at once. The movements should be such that you feel you are "curving" in the

spine, vertebra by vertebra. If this action is deliberately done, there will be a feeling that the pressure on the spinal column is travelling down, inch by inch, till the thoracic section of the spine is curved in.

At this stage the arms ought to be brought into play. The arm movement and the contracted muscles of the back assist each other to extend the curve down to the lumbar section of the spinal column. And when the arms are in the position illustrated the lumbar vertebrae, too, are curved in to centralize the whole pressure at the sacrum. Bhujangasana is completed when this final stage of the movement is reached and then the posture is maintained as advised below.

When the posture is acquired and is maintained for the stipulated time the abdominal muscles, especially the recti, are stretched and the intra-abdominal pressure is increased a great deal. This pressure can be further enhanced if with a conscious effort the abdominal muscles are contracted.

Gentle Relaxation

Now, one should be as mindful to relax from the posture as to get into it. After the stipulated period relax pressure, straighten the spine and bring down the chest to the ground gradually. Begin by relaxing the lumbar vertebrae—each by each as in contraction—then the thoracic, and lastly, the cervical sections till the whole of the spinal column is horizontal and the forehead touches the ground as in the starting position. During relaxation the pressure on the spine travels upwards, as it did in the opposite direction when the posture was being assumed.

As regards respiration—it should be perfectly normal so long as the exerciser is in the novitiate stage. But when the Bhujangasana has been thoroughly mastered one can withhold an inspiration through the duration of the exercise.

Bhujangasana is to be done three to seven times according to the yogic text books. The maximum period for maintaining the posture in each attempt is ten seconds, and the minimum is restricted to five seconds only ; but if it is combined with other exercises, yogic or otherwise, the limit should be five seconds only.

Advantages

Bhujangasana alternately contracts and relaxes the muscles of the back, when the pose is assumed as well as when a normal position is being regained from it. Thus it helps in keeping the relative muscles in good condition and the spinal column elastic. It is said that ordinarily the blood supply in these parts is sluggish. Bhujangasana promotes a liberal circulation of blood in the back by inducing vigorous action in the relative muscular mechanism and the spine.

The muscles thus vigorously exercised are the trapezius, the latissimus dorsi, erector spinae and the gluteal muscles. Because of the anterior pull on the spine each vertebra and its ligaments also have their share of benefit.

An Important Point

Even a single performance of Bhujangasana will immensely relieve an aching and stiff back due to overwork and fatigue. Furthermore, the claim is made on its behalf that Bhujangasana will correct minor orthopaedic defects of the spine, that is, it will set right slight displacement of the spinal column. It will also go a long way to correct the curvatures of the thoracic and the lumbar sections of the spine and it develops and strengthens the abdominal muscles to some extent.

In most muscular exercises little attention has been given to the spinal column. We have already seen that some yogic exercises stimulate it and make it highly elastic ; from this point of view Bhujangasana is an outstanding exercise.

"The thirty-one pairs of spinal nerves emanate from the intervertebral spaces. The two gangliated chains of the sympathetic nerves also lie in the muscles on either side of the vertebral column. Bhujangasana, by promoting blood circulation in these parts, as already noted above, not only keeps the nerves active but also makes them extremely healthy and efficient."

Bhujangasana—like Salabhasana and Dhanurasana—alternately exerts an increased pressure on the heart. We have already noted before that, to maintain efficiency, the

heart muscles require an alternate increase and decrease of pressure. Thus the health of the heart is promoted by it and the circulatory system is also made vigorous.

To extract the best results from Bhujangasana, it should be treated as an accessory exercise to Halasana, Salabhasana (and its variation) and Dhanurasana.

Any person whose spinal column is stiff and inelastic should be cautious with this exercise. He must go slow with it to coax the spine to suppleness and, unless the spine is made supple, the exercise should not be done fully. There should be no jerks whatsoever in doing it because jerks are bound to injure the rigid muscles. The regaining of spinal elasticity will depend wholly upon the judicious performance of the exercise as well as the "dailyness" of practice.

Bhujangasana can be used with immense advantage by those who suffer from flatulence immediately after meals. This is the outstanding therapeutic value of the exercise.

Advanced students can make this exercise infinitely harder but very stimulating. While the initial face-downwards position is assumed place the hands slightly beyond the shoulders in front. Lift the body on hands and toes and slide slowly forward till the hands reach the line of the chest. When this has been done curve up the spine as directed above.

When regaining normal position the body is to be similarly wriggled back as the very last stage of the movement. This variation makes the exercise very vigorous and gives delightful relief in an aching back or when there is a feeling of laziness.



SALABHASANA: THE LOCUST

Salabha is the Sanskrit word for locust. Salabhasana is so called because in it the student assumes a posture which is supposed to resemble a locust with its tail elevated.

Salabhasana is different from all other yogic Asanas because it calls for a sudden muscular movement. The other characteristic of this pose is that the breath is withheld during the duration of the exercise, as in Uddiyana and Nauli.

German leaders of physical culture, headed by Alice Bloch, have preached at length against withholding the breath in any form of exercise, which, according to them, damages and weakens the respiratory organs and the heart. On this ground they condemn almost all the major forms of athletics in which the breath is naturally withheld in making the maximum muscular effort. Salabhasana proves that the withholding of the breath is far from being injurious to the organs mentioned above. This particular respiratory action actually strengthens the lungs and the heart.

Technique

The technique of this Asana, although very simple, is to be learnt carefully.

Lie on your face stretching the body fully and keep the arms straight and close at the sides. Clench your fists and turn them up so that the knuckles touch the floor. Some keep the palms open. The anterior parts of the deltoids, too, must be in close contact with the floor. The feet should also be stretched out with the soles showing up. Take particular care to rest either your chin, mouth or nose on the floor. I prefer resting the chin as it allows the desired backward tilt of the head.

Now, inhale smoothly and deeply, and with this respiratory action contract the muscles of the lower extremities and raise them upwards as far as they will go with a sudden effort, and maintain this elevated position of the legs as long as you can.

To do this stiffen your knees and consciously contract the muscles of the buttocks, upper parts of the thighs and the lower abdomen. The weight of the up-lifted parts of the body rests on the chest and the fists. You will feel the greatest strain in your sacrum and the wrists. Withhold your breath so long as the lower extremities are in the elevated position.

Resume a normal position when you are no longer able to withhold the breath. Lower the legs slowly and not all of a sudden ; relax the contracted muscles and then exhale smoothly.

The yogic texts point out that Salabhasana can be repeated three to seven times. It should never be overdone or prolonged unduly.

Virtues of the Exercise

"One of the chief aims of Hathayoga is to improve the lungs by making them healthy, to render the respiratory muscles strong, and to keep the respiratory passage clear.

"The health of the lungs depends upon the degree of elasticity and the extent of activity of the air-cells which compose them. Such health is assured if all the air-cells are active and the lungs fully elastic. Salabhasana contributes greatly to the health of the lungs. Its characteristic deep inhalation and withholding of the breath exert high pulmonic pressure which forces air into every cell and makes it active. Thus each air cell is taught in time to take part in the normal process of breathing. Salabhasana also makes the lung tissue elastic because it stretches the tissue fully."

Salabhasana helps us in the following different ways :—

1. It brings every air-cell of the lungs into play and makes them active.
2. It makes the lung tissue elastic.
3. It exercises the diaphragm vigorously.
4. It improves and strengthens the cardiac muscles.
5. It exercises the lower abdominal as well as the glutea-muscles.
6. It stimulates the spine.
7. It makes for the health of the nerves of the lower extremities.

An Easier Variation

This is described to help those novices to whom the muscular effort and the strain, due to retention of breath in the above exercise, are likely to hamper progress on account of a weak state of the relative muscles.

Lie face down and assume the same position as for the original exercise. Now, instead of raising both the legs together, raise one, contracting the relative muscles. Use both legs alternately several times to give the parts a due amount of exercise. It need not be compulsory for the beginner to retain his breath until he can do so without strain, when the retention of breath should be considered essential. But as soon as one becomes strong enough to perform the original exercise the variation should be discarded.

It is claimed on behalf of Salabhasana and the variation that they help those persons who suffer from flatulence some time after a meal.

DHANURASANA: THE BOW

Dhanurāsana is so called because to do it you assume a pose which looks like a bow. This exercise is by no means difficult; of course it requires a little adjustment in the beginning because this Asana employs certain unused muscles of your body; after you have stretched and trained those unused muscles to work in the requisite manner the exercise can be done correctly, and thereby you attain greater health and youthfulness. You are as youthful as the elasticity of your vertebral column makes you; this exercise renders the vertebral column pliable and healthy.

Yogis' Advice

Lie on your face, stretching the body fully and with the arms at the sides. Bend the legs at the knee so that they are almost completely folded on the thighs. Turn up the hands and grasp the legs at the ankles tightly. Now, raise the trunk and the thighs from the ground till you are resting on the abdomen. Keep your knees well apart in the beginning because the distance between the knees will make the lifting up of the thighs easier. But when you are used to this exercise, and the bony joints and the muscles have become properly loosened you have to keep the knees together to make the exercise fully vigorous. The yogis advise that the pose be maintained for ten seconds at a time in early practice. Return to the original position before doing another turn.

This construction of the bow calls for a brisk movement; care should be taken, therefore, that no joint is sprained. It is advisable to do this exercise without any jerks. The lifting up of the body will naturally check the breath for a very brief space of time, but once the pose is assumed respiration should be easy and normal. I have already mentioned that the knees should be kept apart which will ensure a greater curve of the lumbar region of the spine. But when the body becomes thoroughly supple, a deep curve



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can be maintained even if the knees are kept together. Ultimately the knees have to be kept together to exert the greatest possible intra-abdominal pressure.

In an ordinary scheme of muscular exercise not much attention is paid to improving the elasticity of the spine. Dhanurasana stimulates the spinal nerves and makes the abdominal and lumbar muscles supple and strong.

This exercise has no limitations. It can be performed by both sexes and at all ages and can either be practised independent of or as supplement to other yogic or muscular exercises.

As regards its therapeutical value it helps those people who suffer from flatulence after meals. It also adds greatly to a sense of well-being.

ARDHA-MATSYENDRASANA : THE SPINAL TWIST

The spinal column is capable of various movements. But it requires purposive exercises to move it within its possible spheres as our occupational activities do not do so. In the yogic scheme, according to the foregoing exercises we have described, we bend the spine forward in Sarvangasana, Halasana and Paschimatana; and the backward movement is effected in the Dhanur-, Salabha-, and Bhujangasanas. These, however, do not include the twisting or the lateral movements of the spinal column, which are as important for securing the health and elasticity of the spine as the other movements.

The Yogic Spine Twist is effected by three exercises. Matsyendrasana, Ardha- or Half Matsyendrasana and a very simple variation. The first two retain the name of their originator, the sage Matsyendranath. As will be presently seen, the postures are valuable both for their psychological and physical cultural advantages.

The exercises are beneficial to both sexes. Once the technique is mastered the performance of the first two becomes a pleasure, as they do away with the stiffness of the body after a hard day's work, especially when it is of a sedentary nature.

We begin with the technique of Ardha-Matsyendrasana as in practice this should come first, the full pose being rather hard to perform. Sit on the ground with legs fully stretched and the trunk erect. Draw up the right leg bending it at the knee and place the sole of the right foot against the left thigh. Now, move the foot further up till the heel is pressed against the perineum—the region between the rectal aperture and the genitals. If you feel the place you will find two upright bones running parallel to each other and having a soft muscular space between them. The heel has to be put and pressed against this soft part. Nothing should intervene



ARDHA—MATSYENDRASANA.

between the heel and the perineum. Do not sit on the heel. If the heel is placed right as advised, the right foot will adjust itself against the top part of the left thigh.

Now, draw up the left leg and place the left foot across the right thigh on the ground. These complete the preliminary stage for the spine twist. The arrangement of the legs is such now as to have the base of the trunk fixed for further requirements of the exercise.

The left knee is now in an erect position. Twist your right shoulder forward to let the knee pass under the right armpit. If your body is sufficiently elastic the knee will jut beyond the armpit; if it doesn't, see that it reaches well out to let the right shoulder be pressed against it. The knee should in no case be allowed to slip out of position, to assure which stretch your arm out and hold the left foot or the left big toe. Avoid all strains and jerks, particularly at the elbow, if you do not want to have a dislocation of the joint. (To illustrate the toe-hold the left foot has not been placed behind the right leg in the photograph.)

The twist is only partial up till now. Twist the left shoulder backwards and pass the left arm behind to hold the top of the right thigh with the left hand. The two shoulders are now pulling at opposite directions to induce the required twist. A major part of the vertebral column participates in the action, to complete which you turn the head vigorously towards the left.

The rib-box is also stretched. Avoid the slightest of forward bends as the whole spinal column must be erect and the chest well forward.

The same technique is to be used to exercise the other side. Two twists in opposite directions should complete one movement.

Time

Hold the posture for a few seconds only and never exceed a minute even when you have become an adept at it. But no such holding in the posture is necessary if you want to make it a purely physical culture movement. As I have already said, in such a case, it ought to serve you as a

splendid limbering-up exercise. As a physical culture method one may regulate the number of movements according to one's muscular efficiency.

In the full pose, Matsyendrasana, the difference lies in placing the heel. Place it against the abdomen just below the navel. This pose is difficult and can only be acquired with constant practice.

I need not refer again to the immense value of spinal culture. The spinal twist will make the column elastic, stretch the rib-box, tone up the spinal nerves and induce a vigorous blood supply. It will also improve the various sets of muscles involved in the mechanism of the exercises. But these advantages are complementary as the chief effect of the twist is on the spinal column. In the source books the exercises are described as two different Asanas but I have taken them and the variation described below as one for obvious reasons.

For the advantage of those people who find the twist hard of performance, and also as a preliminary step to it Swami Kuvalayananda recommends a variation, not unknown to exercise schemes of European origin. The movement is simplified by drawing up one leg while the other is stretched, and by placing the hand opposite to the raised leg on the ground. If the right leg is raised the left hand is placed on the ground away from the right thigh, and vice versa. The other hand is placed towards the back. This induces a twist and it can be made quite vigorous with deliberate efforts.

Advantages

The Spinal Twist will eradicate constipation and dyspepsia, promote a healthy appetite and cure enlargements and congestions of the liver and the spleen. It will also stimulate sluggish kidneys into healthy functioning. It has a massaging effect on the organs of the abdominal viscera. A further claim is made that it will successfully cure lumbago and muscular rheumatism of the muscles of the back. There is no doubt that it tones up the spinal nerves and improves circulation.

It is an adjunct to Paschimatana.

8)



VAJRASANA. (Below) SUPTA—VAJRASANA.



VAJRASANA

Vajrasana and its variation, Supta-Vajrasana, are admittedly difficult exercises for those people who, for some reason or other, have only restricted mobility of the knee-joints. In the practice of these Asanas vigorous knee action is called for ; it is indeed the central action upon which these exercises are based. The benefits that can be derived from them justify the initial awkwardness and the stiffness of the knee and the thigh muscles involved in the action. As the human body is capable of great adjustments to particular needs of movement, and as it can be quickly reclaimed to the necessary mobility, these Asanas can be mastered in a short time.

Of these two Asanas Vajrasana is simpler, and the student is advised to master it completely and establish the requisite suppleness of the knee and ankle-joints before he takes up the other Asana which is more difficult and calls into action almost the whole of the body. This caution must be remembered.

I would advise the use of a soft and level bed for the initial practice of these exercises.

Method

Sit on the bed stretching forward your legs fully. Bend either of the legs at the knee, so that the heel may touch the buttock and the knee is raised, roughly, to the level of the corresponding shoulder. When this is done take hold of the foot with the hand and twist it outwards to place it by the side of the corresponding hip. To do this you have to bend a little to the opposite side to raise the buttocks and lower the uplifted knee. The sole of the foot thus placed faces upwards. The same process has to be gone through with the other leg and foot. There are minor variations of this Asana each with a name for itself and these are characterized by different hand- and foot-placings. In one of these the knees are held widely apart although the feet are not placed any

differently. The right thing to do for the particular purpose of Vajrasana is either to place the feet in such a manner that the heels may be clear of the body and the toes pointed to opposite directions with some space between them, or you can sit on the ankle-joints with the upturned feet drawn close to each other. The knees are, of course, placed close to each other in either posture.

When the seat is thus attained, sit erect straightening the spine. Place the hands on the knees, covering them. It is recommended to close the eyes for concentration.

The caution is to be repeated again. If you are stiff-kneed, master the technique of Vajrasana gradually until the knees respond completely by recovering their natural mobility. Do nothing in jerks or hurriedly.

Supta-Vajrasana

This is a further development of Vajrasana, and can be practised only when the latter becomes easy to you. In this Asana the position of the legs and feet is the same as in its foundational posture, Vajrasana. This attained, you have to lie on your back in a sleeping posture, hence the name, Supta, which means asleep. This process, too, has to be gone through step by step.

After Vajrasana has been attained, place your hands on the bed and having them to support your weight, recline backwards. The arms bend as you recline further backwards till you are resting on your elbows. You are now in a position to place the shoulder-blades on the bed and by transferring the weight of the body on them to free the arms. The head can now be placed at rest. When the trunk reaches this position your spinal column is curved in and there is considerable space between the middle part of your trunk and the bed.

Now bring your arms into use. Lift the head a little and let each arm go under the head to grasp the opposite shoulder, the left hand grasping the right shoulder and the right hand the left. The crossed forearms serve as a pillow to rest your head upon. When this is done do away with the curve of the spine. Deliberately place the back flat so that the whole of it is on the bed.

In Vajrasana the greatest strain is on the knees and the thigh muscles ; in the Supta variation of it the strain is transferred to the ankle-joints ; the strain in the latter is greater.

The Return

To recover the normal position you relieve the arms first. When this has been done the trunk is lifted up and the legs are released. Never should you move the legs until the arms are relieved, otherwise the ankles are very likely to be injured.

Vajrasana can be retained as long as you like, and Supta-Vajrasana should not be done for more than three minutes at the maximum.

There are particular cultural advantages of Supta-Vajrasana. The abdominal recti muscles are fully stretched and the bowels and other abdominal organs are stimulated. It also has a healthy effect on the pelvic organs.

Kuvalayananda treats Vajrasana as a purely meditative pose and does not lay any great stress upon the incidental benefits the knee-joints and other neighbouring parts of the body derive. And Supta-Vajrasana he recommends as a good method for curing constipation.

But other yogic writers differ from this opinion. According to them Vajrasana, done half-an-hour after a meal, greatly helps digestion. Dyspepsia is cured by it. Both the Asanas strengthen the muscles and nerves of the legs. Myalgia in the legs and knees disappear. Sciatica is radically cured and so is flatulence. The particular advantage of Supta-Vajrasana is that it removes undue spinal defects.

PASCHIMATANA

By Paschimatana is meant the stretching of the posterior muscles of almost the whole of the body.

. Sit on the floor and stretch the legs fully, keeping the knees together and straight. Lean forward and hook the big toes with your forefingers, the right with the right and the left with the left. Pull at the toes without lifting the legs, which will thus be completely stretched, and keep the knees straight. You now bend further forward and place your face on the knees. A curve is thus formed at the lower region of the spinal column and the body is doubled up. While bending the body forward bend the arms also at the elbows, and these should rest on the ground. The pull at the toes should not be lessened and the knees should be kept perfectly taut to ensure the complete stretching of the lower part of the spine.

Task for the Beginner

The beginner, even if he has devoted some time to muscular exercise, is likely to be ill at ease with this posture. The average person can hardly bend his body at the waist and keep the knees straight. This condition, of course, reveals unused muscles and a general unhealthy stiffness besides the lack of elasticity of the bony joints. This exercise will certainly tax the beginner particularly because the hamstring muscles behind the knees are brought into severe action ; these, as a rule, are seldom exercised beyond the occupational sphere, but with practice all the relative muscles and joints can be tutored to work in the required directions.

Middle-aged and old persons will find this exercise very hard to perform on account of the stiffness of the spinal column, but they too can master it and improve their physical condition with perseverance and patience. Although their spinal columns are not likely to shed their stiffness entirely they can be made more pliable.

(9)



PASCIIMATANA : First Stage. (Below) Final Stage.



People who find themselves stiff and cannot keep the knees straight should catch hold of the ankles or any part of the legs in the earlier stages of practice ; the toes can be taken hold of when the muscles have become more pliable. In time the stiffness is bound to wear off and the body will become more flexible. Jerks and unusual strains should be studiously avoided. To master this useful exercise daily practice is essential.

It is laid down that novices should practise it for fourteen seconds only, while advanced pupils can maintain this pose for three full minutes. The increase in the duration of the exercise ought to be slow. If the early practice is partial and awkward on account of stiffness Paschimatanana should be done in snatches to make up full time.

As I have already said, Paschimatanana exercises almost all the posterior muscles and particularly the hamstring muscles ; it also strengthens the abdomen. The nerves arising from the lower region and serving the pelvic organs are greatly toned up and stimulated ; the blood supply in the pelvic region becomes richer. The Yogis claim that Paschimatanana has great spiritual significance. This exercise has no limitations and is available to the young and old of both sexes.

Therapeutic Value

As regards its therapeutical value it builds up a powerful abdomen, tones the inner organs and cures dyspepsia and constipation. It is recommended as a measure against the recurrence of sciatica.

What the student should specially remember is that Paschimatanana should never be performed for more than three minutes. Kuvalayananda warns us that if this limit is exceeded it is likely to develop constipation instead of curing it. As a safeguard it is wise to practise Uddiyana several times after Paschimatanana to counteract its tendency towards promoting constipation. The student should watch its reactions on the bowels and regulate the period of exercise accordingly.

MAYURASANA : THE PEACOCK

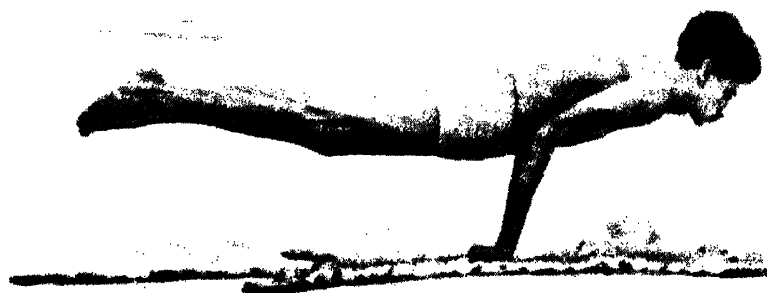
To gymnasts the yogic posture known as Mayurasana is easy. In modern gymnastic practice it is a straight planche with the forearms as levers. The yogic purpose of the exercise, however, is wholly different. When you assume this posture you are supposed to resemble a peacock, which explains the Sanskrit name Mayurasana.

Study illustration No. 1, according to which you kneel down with the knees fairly apart. The heels of the hands are in a line with the knees and the forearms are placed close to each other. The fingers, of course, point backwards. The elbows are kept together to provide a suitable fulcrum on which the horizontal body rests. The forearms represent the legs of a peacock. The palms are reversed and the fingers spread out to help you maintain the balance of the body in such an unnatural and awkward position.

The exercise is a hard one undoubtedly, and you have got to spend some time mastering it till it becomes easy and facile. Fat and weak people may have some bumps in the beginning but these are purely incidental and are soon eliminated.

Head Up

When the above position is assumed, place the elbows against the abdomen just below the navel. Now stretch out the legs straight. Incline the forearms a little forward to help you raise the legs from the floor. The muscles of the body, particularly those of the legs, the buttocks and the abdomen are to be held vigorously tensed to elevate the legs and keep them in that elevated position. The greatest muscular strain which has to be maintained throughout the duration of the exercise is in the small of the back. If the head is held down you will never obtain the required balance. When the posture is thus assumed the body is in a perfect straight line.



Let me repeat that during the first days of practice Mayurasana will prove very exacting, it will use up great muscular energy, but it will become quite different afterwards. Therefore, in the practice days it will be advisable to hold your breath doing the exercise ; it will help immensely. Later on, of course, you will be able to breathe in the normal manner while you are in this posture.

Mayurasana is useful by itself, as we shall see presently, and it also constitutes a very important part of Basti, the Yogic way of flushing the colon. As an accessory to Basti, however, the legs are employed differently ; they are not held together and parallel to the floor, but are spread out and raised to resemble a peacock spreading out its brilliant plumage.

Many Advantages

As to the significance of this variation I quote from one of my source books :—

“The change has a physiological purpose to serve. Parallel and horizontal legs require the muscles of the buttocks to be fully contracted. The internal anal sphincter is also tightly closed. This is quite desirable when the pose is to be practised for itself, because it helps to increase the intra-abdominal pressure which is one of the advantages sought in Mayurasana. But when the exercise is done as a sequel to colon flushing, its aim is to drive out the lingering liquid from the large bowel. This requires the anal sphincters to be in a relaxed condition. In order to make this relaxation possible the legs are spread out. It is to be remembered that the muscles of the buttocks remain partially contracted even in this condition. This partial contraction, however, does not prevent the ejection of the colon liquid, if the anal sphincters are completely relaxed. The partial contraction of the muscles of the buttocks with a simultaneous relaxation of the anal sphincter requires some practice in muscle control. In traditional yogic schools students are not allowed to practise Basti unless they master this essential technique.” (Kavalayananda)

This Asana checks the flow of the main abdominal artery and diverts the blood supply to the digestive organs. Thus they become healthy and are strengthened on account of the greater intra-abdominal pressure of this Mayurasana exercise.

Duration

Start from five seconds and increase the duration of the Asana cautiously and progressively to three minutes.

Mayurasana cures dyspepsia and is a good measure against the sagging of the abdominal organs. It increases appetite and the power of digestion. It is supposed to cure chronic gastritis. It reduces to normal splenic and hepatic enlargements, and cures a sluggish liver. It stimulates the lungs as well. It removes constipation.

It is further claimed that Mayurasana controls wind in the stomach and biliousness. The biggest claim about it is that it cures diabetes and bleeding piles. It is undoubtedly a great energising exercise.

But Mayurasana is nearly useless in advanced cases of dyspepsia, the sufferers from which are hardly able to strike the pose, and even if they do so, to withstand the immense strain it produces.

Lolasana can be done when the Mayurasana has been completely mastered. As you sit according to illustration No. 1 fold the legs so that the heels are placed against the opposite groins. The weight of your body will now rest on your hands and knees. Now slowly raise your folded legs. It is called Lolasana as the folded legs are swung in this position.

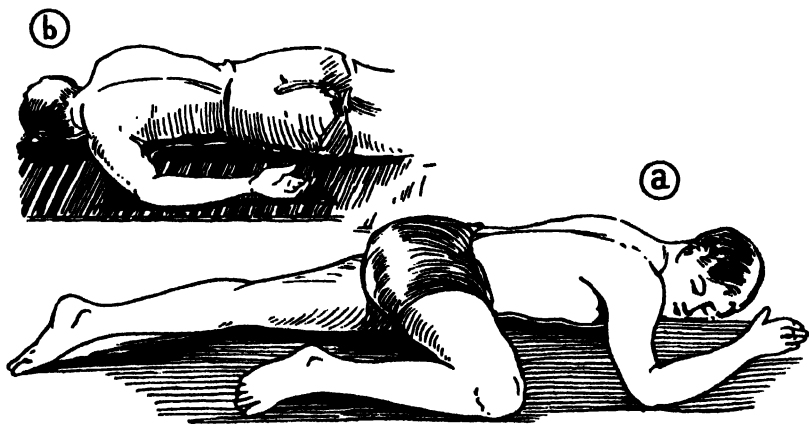
Hamsasana is quite easy. See the second illustration. Instead of keeping the legs in an elevated position place the toes on the floor but keep the knees straight. As this is supposed to be the posture of a duck it is called Hamsasana.

The benefits of Lolasana are the same as those of Mayurasana. Of Hamsasana, however, the benefits are evidently only of much lesser degree.

SHAVASANA: RELAXATION

It is a well-known fact that in our occupational postures of standing, sitting or working, relative groups of muscles are in a constant state of contraction. Even when we are in bed we cannot go to sleep straightaway on account of some muscular tension. To sleep we get into a position of relaxation unconsciously ; unless we do so no amount of counting figures and imaginary sheep, or washing the head and neck with cold water can induce sleep.

Assume a position on a level bed as in the drawing below, Fig. (a). You need not follow the figure in every detail, it just gives an idea as to what the posture should be like. You have to adjust yourself a little to secure complete relaxation. Such an adjustment is necessary because no two physiques are alike. Slight deviations in the positions of the



head, arms and legs are necessary for every person. If the face is turned to the right, the right arm and the leg are drawn up as illustrated. For the position of the other arm see Fig. (b). The same can be done on the left with the face turned to that direction. Now close your eyes and breathe evenly. But if the attempt to breathe evenly calls for any

great attention to the respiratory activity, leave it alone ; for our aim in this is to relax muscularly, soothe the nerves and to induce sleep.

This can be mastered with very little practice if details are not forgotten.

Another Method

The other method of relaxation is yogic and a comparatively difficult one. This method is known as the Shavasana, or the corpse pose, because to do it you imitate the dead body. In the former method the final aim is to induce sleep, but in the Shavasana you have to take care not to go to sleep, because by practising this one your aim is to have conscious control over relaxation, respiration and concentration, and you are undertaking a cure for the wavering mind.

The photograph is explained thus. As in the former pose, lie straight on your back on a level bed and without a pillow under the head. Place the arms fully stretched at the sides and keep the heels together. Loosen your muscles perfectly; the loosening should be such as to make every part of the body absolutely limp,—limp as a dead body before rigor mortis or the stiffness of death sets in. The loosening is complete when you have a sensation of collapsing. This, of course, requires a good deal of practice.

The yogic student starts his practice by relaxing the body part by part, and he starts with the chest-box or thorax. The abdomen comes next, then follows the relaxation of the upper and lower extremities. The brain is relaxed last of all. When you have thoroughly mastered the relaxation of the parts, the relaxation of the whole body comes easy.

As regards the eyes they are either kept open or closed in the Shavasana. They are kept closed in the initial stages, but when you are able to concentrate without closing the eyes, you need not keep them shut. This is a difficult job, however, and this stage is not reached in a week or a month.

The Wandering Mind

The other phase extends to the respiratory activity. When muscular relaxation is secured you are called upon to



regulate your breath ; the aim is to make inhalation and exhalation rhythmical and even for better health, and to enslave a wandering mind.

There are three stages in this. In the first you watch your inhalation, which goes on normally, but do not try at all to increase its volume or to make it a long drawn-out affair. Go slow with it, observe this for two or three minutes at first, and with practice you can go up to ten minutes. The mind will of course waver, but overcome this tendency.

You will soon find that your breath is irregular, that is, the inhalations and exhalations are not only unequal but each is not uniform by itself. The yogic experts trace many illnesses to this irregularity, so in the second stage both inhalation and exhalation should be made to occupy the same length of time. This can be done by shortening the long and lengthening the short respiratory movements. In this stage only a rhythm in the flow of breath is established, and no attention is to be given to the volume of either the inhalation or exhalation. This stage is practised for about fifteen minutes a day. In effecting this rhythm one may feel suffocated a little in the beginning but the feeling soon passes off.

Shavasana, if correctly done, tends to relieve heightened blood pressure.

YOGA-MUDRA

To get into the posture known as Yoga-Mudra the foot-lock or Padmasana is of primary importance. It is the same as is used in Matsyasana.

Sit on the floor with the legs fully stretched out together, and the hands resting on the floor on either side of the thighs. Bend the right leg at the knee and place it on the left thigh, the right foot being placed on the top of it ; the sole of the foot will thus be turned upwards. Place the left foot, in a similar way, on the right thigh. The heels must press against the abdomen. The placing of the heels is extremely important in this exercise. The right heel has to be so placed as to exert pressure upon the pelvic loop, and the left heel is placed to press the caecum. One should, of course, use the hands to get the heels into proper positions.

No Stiffening

The foot-lock effected, move your arms back and grasp the left wrist with the right hand. There is of course no need to stiffen the arms. The last stage is now to bend forward over the feet and place your forehead on the floor, quite a difficult feat for the novice as well as the person who lacks suppleness. But it is marvellously easy to attain the full forward bend if one tries to reach it by stages. Bend forward as much as possible each day and maintain what little bend you attain for a little time. Thus in a few days the accessory muscles will be trained and one should be able to perform this exercise efficiently according to requirements. When you bend down take care that the attempt is made without jerks, which are liable to damage the vertebral column.

Kuvalayananda points out that the stomach, the bowels and the other abdominal viscera have a tendency to be displaced downwards whenever the muscular wall of the abdomen becomes weak. Nearly every man suffering from chronic constipation also suffers from the displacement of the abdomi-

nal organs. There are some Asanas which are calculated to restore these organs to their original positions and are treated as replacing exercises. Kuvalayananda marks Yoga-Mudra as one of them. Most other writers on the Asanas have very little to say on this point.

But to make Yoga-Mudra a replacing exercise a little change in the technique is necessary, and this change is merely in the placing of the hands. Instead of holding them at the back, take hold with them of the portions known as the arch of either foot. Thus in the forward bend you bend over a rounded surface composed of the heel and the hands, which exerts an even and upward pressure on the abdomen, and the sagging internal organs are pushed up and returned to their original positions.

In this exercise one can breathe in the ordinary way but exhalation will help one to get into the bend.

Times

Either as a pelvic or replacing exercise Yoga-Mudra is to be done from five to ten seconds, and the exercise can be repeated several times in one sitting, three being the minimum and five the maximum. But if it is done to improve the nervous system the posture can be maintained to the extent of three minutes as the maximum period.

The placing of the heels against the caecum and the pelvic loop, usually the centres of intense constipation, stimulates these parts when the pressure applied by the heels is even and steady. In this manner it eliminates constipation. Constipation caused by displacements is also cured as Yoga-Mudra is a powerful replacing exercise.

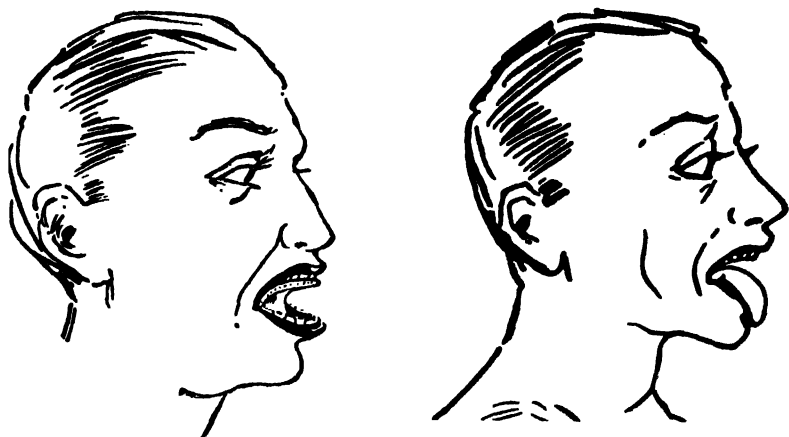
JIVHA-BANDHA : THE TONGUE-LOCK

Whereas no physical culture scheme ever claimed to exercise the tongue, yoga has evolved for it a specific posture with immense advantages. This particular yogic posture is known as Jivha-Bandha or the tongue-lock.

"In the roof of the mouth the palate is hard to a considerable extent beyond which there is a soft area. The hard palate is encircled outside with the upper set of teeth. The tongue can be brought into close contact with the palate as it has great mobility and also one can control its movements, composed as it is of voluntary muscles. The outer visible portion of this muscular organ is free. If it is raised up we find that it is attached at the base, and in the middle line of this muscular attachment there is the frenum, a strong structure of tough fibrous tissue running up from the base to the lower surface of the free portion of the tongue. The side muscles of the tongue can be controlled to a certain extent but the most effective control that can be exercised is at the frenum. Through this part it is possible to exert pressure on this little organ upwards, backwards and to the sides."

The Tongue-lock

The use of a hand mirror will help in effecting the tongue-lock correctly. Open the mouth widely and place the tip of the tongue close behind the front teeth. When this contact is made draw up the lower jaw just a little so that an upward pressure on the tongue can be exerted to let it fill all the space of the hard palate and that portion of the soft that can be reached by it. If the pressure is great or sudden, that is, if the tongue is contracted suddenly it will elongate instead of spreading under the palate. But slow pressure exerted with the object of spreading the tongue so that it is completely



encircled by the upper set of teeth and pressing it against the palate will be the necessary procedure to secure the lock. I have almost explained the technique given in the text books. My own experience is that the lock becomes simpler if the lower jaw is drawn up a little and the relaxed tongue is first sucked up against the palate. If slow pressure is then exerted the tongue fills the space as required. This will require a little preliminary practice and in time one can establish absolute control over this little organ. Such control is necessary because the tongue-lock is not maintained for a time once it is effected as is done in most other yogic exercises; the tongue is rather forcibly extended out of the mouth, and the lock secured, alternately.

I have advised the raising of the lower jaw at a particular stage to eliminate the interference of muscular contraction, as the facial muscles, particularly those of the cheeks, show a tendency to contract while effecting the tongue-lock. This should be prevented. It will not be possible to establish the lock desirably if the adjacent muscles are brought into play.

The tongue-lock can be practised independently as a single exercise, as well as a part of Viparita Karani. It is also practised with another Asana the Simhasana.

If combined with Viparita Karani the Jivha-Bandha should be done with the mouth shut. There is a Mudra of purely spiritual value, known as Kechari Mudra, in which the Jivha-Bandha is done with an open mouth. In this Mudra the tongue

is raised and placed completely behind the soft palate. And as the frenum opposes this movement of the tongue it is supposed to be severed for the purposes of the Mudra. I have mentioned this as one of the other uses of the tongue in the yogic scheme, but it is beyond the purpose of our present studies.

In Simhasana, apart from the particular positions of the body and the eyes, the tongue is let out forcibly so as to make the tip curl up a little. This and the Jivha-Bandha, as described above, are practised alternately to be thoroughly effective and are done in rapid succession—that is, the tongue is locked in one turn and in the other is let out. These rapid alternate movements should be done about twelve times a minute, according to the source books. Start from four complete movements and increase to thirty by additions of two movements each week.

Advantages

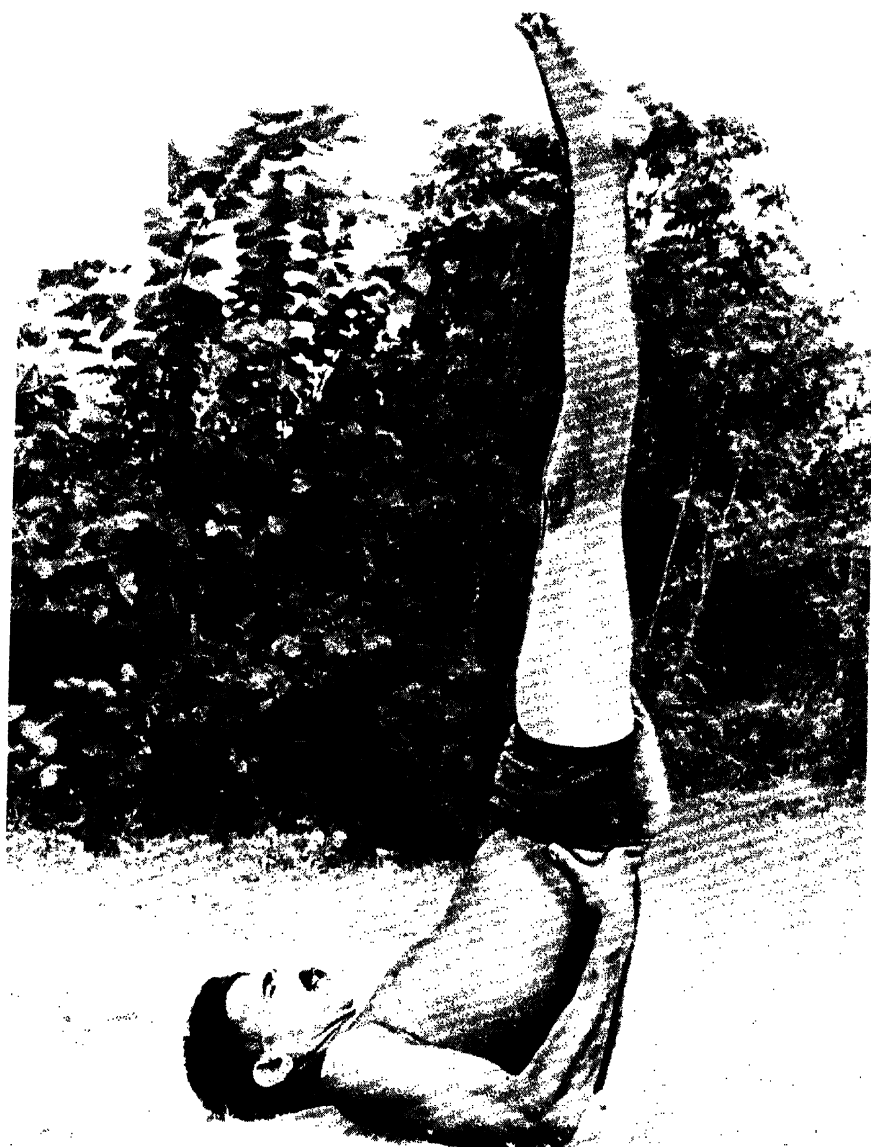
For physical culture purposes, I believe, it is not necessary to observe the details of Simhasana; it is enough to combine its tongue movement with Jivha-Bandha.

The advantages of the tongue-lock are varied and important. Regarding its cultural advantages the source book lays down :—

1. Muscles of the neck are exercised and the blood circulation therein is improved.
2. Cervical nerves and the ganglia are rendered healthier.
3. The pharynx and the larynx are exercised and their health promoted.
4. The thyroid is rendered healthier.
5. The auditory apparatus is made more efficient.
6. Salivary glands function more satisfactorily.

As regards its curative values we have from the same source that,

1. Jivha-Bandha removes congestion of the pharynx.
2. It has been found very useful in treating tonsilitis.
3. It is claimed on behalf of Jivha-Bandha that it cures deafness due to thickening of the ear drum.



VIPARITA KARANI, an easier variation of SARVANCASANA.

VIPARITA KARANI OR THE INVERTED POSE

Sarvangasana is the simplest and one of the most efficacious of yogic exercises. A considerable number of people, mostly over 30 years of age, are simply unable to perform the Sarvangasana on account of the stiffness of the spinal column and loose abdominal muscles. Hereunder is an easier variation to be practised.

By itself Viparita Karani is a good exercise, but as it has a milder effect it will be prudent to treat it as a step to Sarvangasana. I have selected it to help those of my readers who cannot take to Sarvangasana right away.

The Method

As in Sarvangasana lie at full length on your back with arms at your sides. Raise the legs slowly until they complete a right angle with the floor. Keeping the legs in the erect position raise the hips and curve up the lower portion of the trunk. To help this further movement hold the hips with your hands. The trunk is not held erect as in Sarvangasana but it is only curved upward as illustrated. The upper portion of the trunk right down to the cervical part of the spine and the upper arms rest on the floor. When you have mastered this position you should make constant attempts to raise the body higher and higher into an erect position until Sarvangasana is finally reached. Although the arms and hands work as props in both these exercises the strain on them is greater in Viparita Karani on account of the slanting position of the lower part of the trunk. But one can get used to this without undue strain.

(In the Viparita Karani the yogic tongue-lock is also used, but for our present purpose we can do without it.)

In the beginning this posture should be maintained for half-a-minute. Although the yogic text books put the limit at three hours, one can profitably reduce the time to twenty-four minutes which is to be reached gradually.

Two recent instances remind me that there are people who cannot even perform this simple variation. The two readers who called on me for personal instruction were simply unable to move the hips up while in a lying position. People like them have necessarily to go through some muscular exercises to limber up their abdominal muscles and the spinal column, and these exercises consist of bending at the waist in all possible angles while standing, and a bit of leg raising while in a lying position. Such undoubtedly make easy the performance of Viparita Karani and later Sarvangasana.

The Points of Difference

In Sarvangasana the body is at right angles with the floor and it rests on the shoulders and the neck. In Viparita Karani the lower part of the trunk is only curved up and the body rests on the head, neck, shoulders, upper part of the back and the upper arms. The chin is not tucked in against the chest in Viparita Karani.

Sarvangasana promotes thyroid activity and maintains a healthy thyroid. It is well known that this gland is responsible for the general health of a person. Viparita Karani does not bring the thyroid into action. The other effects of this exercise although similar to those of Sarvangasana and Sirsasana are milder in nature.

Advantages

1. The static legs-up position of the body holds the contents of the thoracic and abdominal viscera in an inverted position, thereby inducing a sort of massaging effect on them. It strengthens and tones up the internal organs.

2. It prevents and cures intestinal stasis, and the sagging of the abdomen on account of the increased looseness of the intestines (visceroptosis).

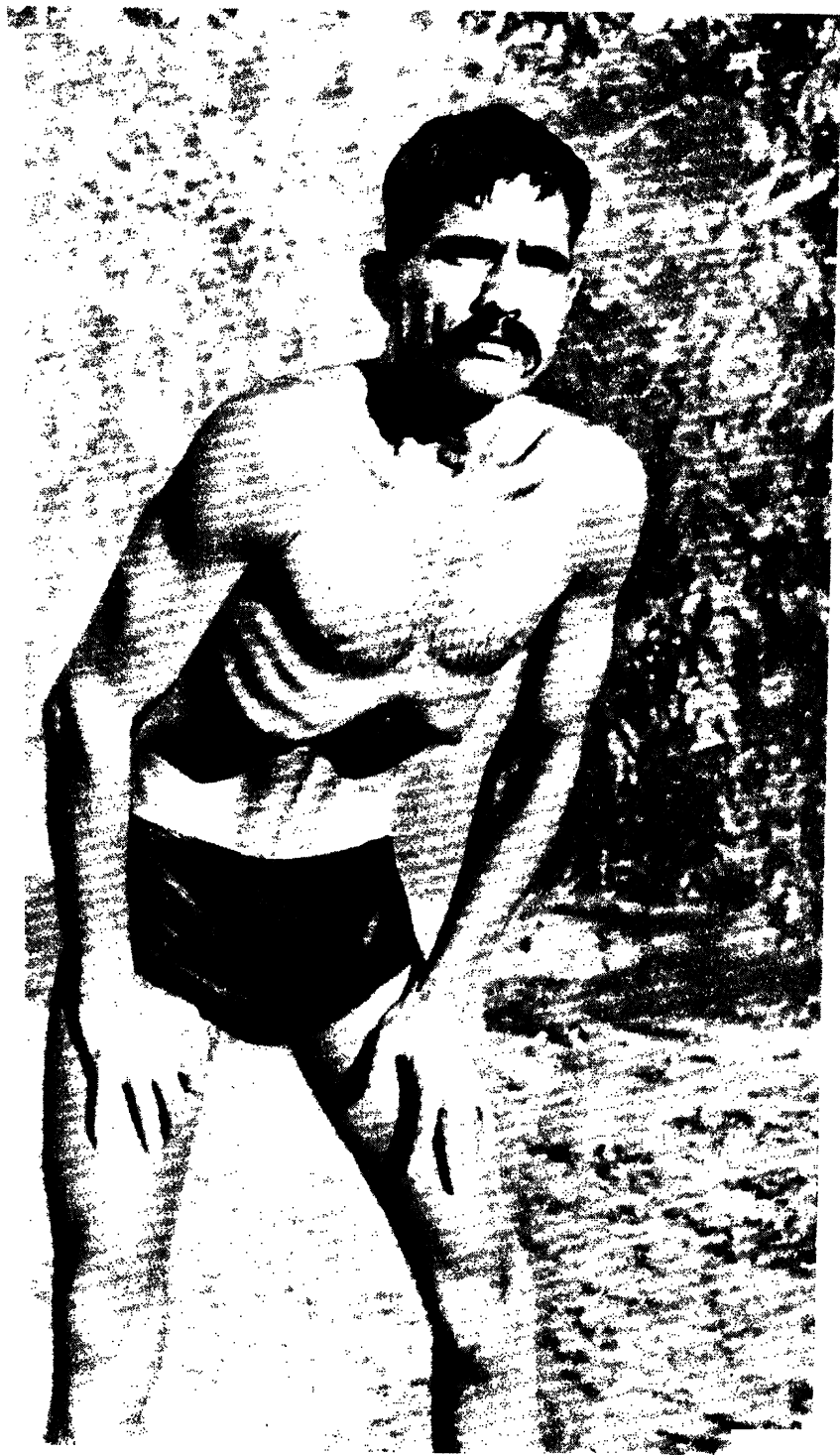
3. It cures dyspepsia and constipation.

4. It secures the proper elimination of waste materials.

5. It strengthens digestion.

6. It prevents and cures hernia.

Like Sarvangasana this exercise should not be performed by persons suffering from a weak heart unless advised by an expert.



UDDIYANA, a yogic abdominal exercise.

UDDIYANA

This yogic abdominal exercise is broadly divided into two parts. In the first, the diaphragm is raised and a concavity is formed in the abdominal region. In the second, the abdominal recti muscles are isolated. This second part, however, is further divided into two distinct stages ; in the first the recti muscles are simply isolated, and in the second they are rolled in a sort of vertical wave. The initial part, that is, the raising of the diaphragm and the resultant concavity of the abdomen is known as Uddiyana. It forms the basis of the isolating and rolling movements just mentioned. The latter movements are known as Nauli, which is simply a development of Uddiyana.

Uddiyana and Nauli are universally known now, and are regarded by physical culturists all over the world as very impressive display exercises. Curiously enough, these exercises have recently come to India through English sources, and are still largely regarded as European exercises. In 1910, Maxick, the famous German strong man and muscle-control expert, made his debut in England at the Holborn Empire with these exercises and held his English spectators in great wonderment. He claimed that like his other muscle-control stunts he had discovered these exercises, little knowing that these were known in India ages ago.

A Profitable Exercise

While Uddiyana is simple to perform Nauli is by no means an easy exercise, as we shall see later ; but it can be mastered with perseverance and ample concentration. Even if Nauli is not mastered, the easier part, that is Uddiyana, is not at all devoid of appreciable cultural and therapeutic values ; it can be practised with immense profit.

Uddiyana can be done either sitting or standing ; to my mind the standing position makes the performance easier. Stand with the feet about 18" apart and the knees bent, and then bend the trunk slightly forward. Place the hands on the thighs. This position of the hands lends support to the shoul-

ders and the neck which are thus kept in a fixed position. When this stance has been secured, exhale as completely as possible, contracting the abdominal muscles vigorously in the action. While the breath is held out press against the thighs with the hands. Straighten the trunk slightly and by an effort of will draw in the abdomen making the same muscular movement as in chest-breathing but without any actual inhalation. This effort, combined with atmospheric pressure from outside, will form the desired concavity in the abdomen and raise the diaphragm. During exhalation the abdominal muscles are vigorously contracted, but they are relaxed as soon as the exhalation is complete. Unless these muscles are in a relaxed condition the concavity will not be formed.

To recapitulate : Uddiyana comprises three actions after the stance has been secured, (1) the fixing up of the shoulders and the neck ; (2) the vigorous exhalation and a muscular movement imitating costal or chest-breathing without inhaling any air, and (3) the relaxation of the abdominal muscles and the drawing in of the abdomen.

The diaphragm rises up and there is a deep abdominal depression. If the body is bent forward again a little the abdominal muscles can be further drawn in to form a deeper concavity. This completes the technique of Uddiyana.

To regain the normal position the neck and the shoulders are relaxed first, the diaphragm is loosened and one inhales gently. The abdominal cavity is effaced gradually. The return to the normal position must not be hurried or jerky.

Uddiyana should be practised with an empty stomach.

If a tumbler of water with a pinch of rock salt is drunk before the practice of Uddiyana a movement of the bowels is facilitated.

People with an abundant supply of adipose tissue round the abdomen will never be able to perform this exercise. It should not be done if any internal pain is felt during the exercise. Uddiyana is not advisable for persons suffering from heart trouble.

Uddiyana can be performed by both sexes and at all ages. It cures constipation, dyspepsia and liver trouble.

THE NAULI

Nauli is best performed standing, unless it is done as a preliminary to Basti,—the yogic process of flushing the colon.

Uddiyana described in the previous chapter is the foundational exercise to Nauli. One has to remember that in Nauli only the muscles known as the abdominal recti are brought into use. These recti muscles originate at the pubic bone and are attached to the ribs above. This point of origin is all-important in attaining the Nauli.

To begin with one must adopt the Uddiyana position and, while maintaining that, press against the thighs the hand and simultaneously exert a forward and a downward push to the point mentioned above. The push at this region contracts the recti muscles keeping the other muscles of the abdomen in a relaxed condition. In due course the isolation of the recti is secured. It is undoubtedly a difficult exercise in the beginning, but once the technique is mastered it becomes absolutely easy. I would advise its practice before a mirror to watch what progress is made and whether the technique is being employed correctly. The whole of the abdomen must not be contracted ; only the particular muscles are to be isolated and the others left absolutely inactive.

The recti are first isolated at the origin. Once this is done they are automatically contracted right up to the point of their attachment to the ribs. Of course, the forward and downward push is always there to maintain the contraction of the muscles. A complete isolation will show in a vertical line from the pubes to the sternum. This is known as Nauli-Madhyama, or the central aspect of Nauli. This is but the first part of the whole exercise of isolation. A student can only proceed to the other part when this has been thoroughly mastered. The central isolation must be easy, it must be painless, and one should be able to perform it several times in one exhalation before the last stage is reached.

The Second Part

The other part consists of isolating each rectus muscle separately and rolling both alternately in a wave-like movement.

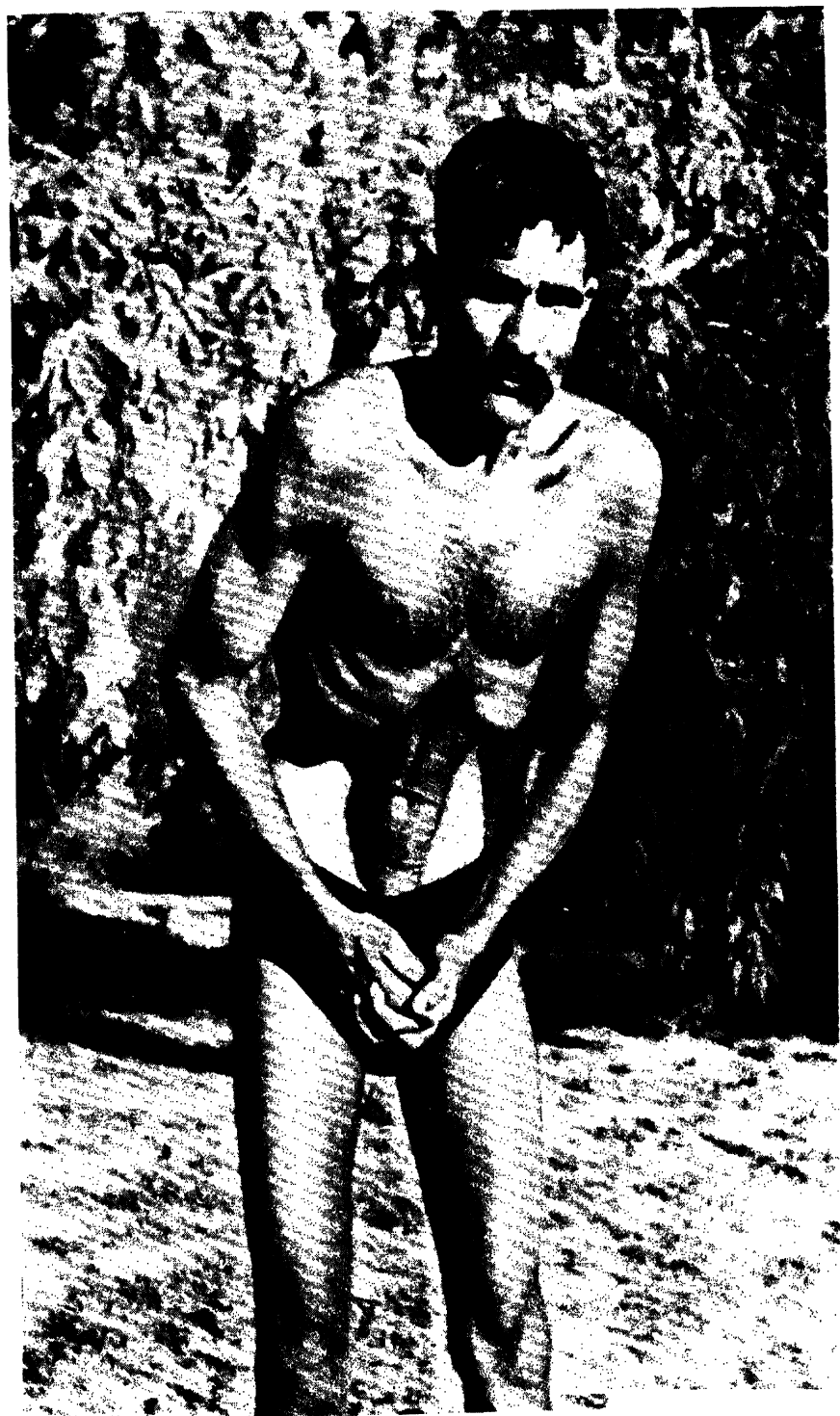
While maintaining the central isolation one bends forward. If the right rectus is to be isolated the student bends towards the right and keeps the body comparatively erect at the left side. The trunk is given a lateral bend to the right. This bend towards the right contracts the right rectus ; the left one is relaxed by an effort of will. The isolation is more easily secured if the pressure exerted on the thigh is only by the hand corresponding to the rectus muscle which is being isolated.

The same technique applies to the left rectus. When the recti have been brought under perfect control singly, one is ready to roll them from side to side. Co-ordination between the two muscles is soon established in the practise, and they are moved across the abdomen in a sort of a vertical wave with great speed. From the central isolation the left rectus is rolled to the extreme left while the other is kept in a relaxed condition. Simultaneously, with the effacement of the left isolation, the right rectus is now contracted on the extreme right and, from there, it is rolled to the centre where it disappears and the left is contracted. This can be done quickly a number of times in one exhalation.

For the man of average health seven turns in one exhalation will be enough ; a strong man can perform it twenty-one times.

Nauli, like Uddiyana, should be done on an empty stomach. Its limitations are as follows. Persons above forty should not perform it. Persons suffering from or suspected of abdominal tuberculosis should not practise it. It is contra-indicated in chronic appendicitis and in high blood pressure. Boys and girls of a pre-pubertal age should not perform the exercise.

Neither Uddiyana nor Nauli should be performed by those who suffer from heart trouble. The latter prevents dyspepsia and constipation and is a corrective for the liver, spleen, pancreas and kidneys. It is also considered most beneficial to women suffering from menstrual disorders.



NAULI, a development of UDDIYANA.

SCOPE AND LIMITATION

So far I have dealt with Hathayoga exercises in their cultural and therapeutical aspects. I will now try to explain briefly the aim and method of yogic culture to enable readers to understand Hathayoga in its true perspective.

Broadly speaking, Hathayoga performs three functions, viz. (1) it establishes supreme efficiency of the brain, spinal nerves and organs in the thoracic and the abdominal viscera ; (2) it effects control of metabolism so that there may not be any physiological disturbances in the acquisition of spiritual power; and (3) it prevents and cures many organic diseases and defects. In spite of all these virtues Hathayoga is not the all-important phase of yogic culture; it represents a method which is but of tertiary importance in the whole scheme.

Yogic culture is divided into three stages of which Hathayoga is the third one. Hathayoga itself is divided into two classes. Although the cultural Asanas or poses in Hathayoga constitute an excellent system of physical culture, the chief aim of the whole scheme is to prepare and help a person in spiritual advancement. Unless all the phases are gone through and properly mastered one cannot become a real Hathayogi, however much he may be devoted to yogic exercises; in other words, the mere performance of the cultural part of the scheme will undoubtedly endow one with excellent health of the nervous, the endocrine and the digestive systems but it will not develop those mental qualities which go to make efficient and powerful men and women.

Mental Exercises

The first two parts in yogic culture are but forms of mental hygiene necessary both for the practice of Hathayoga and also as the foundations of a spiritual life. The interdependence of body and mind is well known, and Hathayoga is based on the fact that the mind has more influence on the body than the body has on the mind, and so mental exercises form the main part of the yogic scheme.

The first stage is known as Yamas. These consist of the rigorous mental practice of "inoffensiveness, truthfulness, continence, suppression of the instinct of stealing (Moll and Havelock Ellis along with some other psychologists no longer regard stealing as an instinct but it was regarded as such by ancient and older psychologists), and the utter denial to receive anything from any hands"; the second stage is known as Niyamas, which consist of the culture of "purity, contentment, great self-control, 'mortification', and complete self-surrender to the Lord." These two stages are given precedence in the yogic scheme, and it is laid down that without practising these, the mere culture of Hathayoga will not yield the desired results, that is, it will not bring about spiritual advancement but will merely become a culture in which physical well-being will be the only result.

Hathayoga consists of cultural and meditative poses. Those who seek physiological advantages stick to the cultural Asanas, and spiritual culturists combine both the features in their practice, and, ultimately, devote greater attention to the meditative poses, of course, when the flesh has been desirably controlled and conquered.

No Muscular Advantages

Those who seek muscular bulk and great muscular strength are apt to be disappointed with Hathayoga exercises, which only claim to improve the condition of the brain, the vertebral column, the organs of the thoracic and abdominal viscera, the nervous, endocrine and the digestive systems. Hathayoga will not go any further. But almost all the cultural poses can be combined with any scheme of muscular and strength culture, with or without appliances, with great advantage. Some of the yogic poses, especially Uddiyana and Nauli, are already regarded as muscular exercises. An inordinately large number of physical culturists either never realised or completely lost sight of their therapeutic values for that reason. Ordinary physical culture fans are apt to disregard the value of Hathayoga exercises as they fail absolutely to give the arm and leg muscles the desirable girth and shape. It is true that though Hathayoga can make these particular parts of the body healthy they can never gain in strength and bulk through this method.

In combining Hathayoga with muscular culture only one restriction is to be strictly observed. Hathayoga must precede or follow muscular and strength exercises with a rest of at least twenty minutes between the two. The combination is very much worth while as Hathayoga enjoins severe mental discipline, which is by no means the characteristic of any other system of physical culture.

I have myself used certain Asanas to enlarge the scope of ordinary physical culture and athletics which I have pursued. Persons with such a coarse aim like myself who are not keen to attain spiritual emancipation will find the combination very useful. I have also found that the Asanas enlarge the scope of modern medical gymnastics. Furthermore, the Asanas are more capable of preserving a person's youthfulness than the ordinary "daily dozen," both on account of their influence on the endocrine system and also the very deep effect they have on the vital organs and parts of the body, especially on the spinal column.

As regards the value of meditative poses, "they establish in the body such physiological conditions that the mind ceases to be disturbed by any stimuli received from the body. In fact, the body stops entering into consciousness altogether."

"Kundalini"

The cultural Asanas establish physiological balance in the different systems in the human body and effect organic vigour, and it is further claimed on their behalf that they train the spinal cord and the brain to awaken the spiritual force known to yogis as Kundalini. In the preliminary stages of these Asanas there are inevitable physical movements, but once a particular posture is assumed the exercise becomes static, that is to say, the posture is maintained for the stipulated period without the least movement. Although the external muscles do not develop bulk through these exercises they maintain their elasticity and vigour.

GOMUKHASANA : THE COW

To many of my English readers Gomukhasana is known as the Cow-pose. The Sanskrit name indicates the appearance of the completed pose. Uninitiated, fat people and those whose bodies have become rigid will find the pose rather difficult at first. Lean people and exercise "fans" take to it very easily. Gomukhasana is by no means so difficult as to defy all consistent efforts whatever may be one's body condition—pliable or stiff. It will only require some perseverance to master it in due course. For the Indian reader it is comparatively easy, for the European it is not so, as for him there is the added difficulty of squatting on a level surface. But I have watched many of my English friends doing it to perfection with great ease.

Technique

Sit on the floor. Fold the thighs one over the other. If you are crossing the right leg over the left, the latter is to be thus adjusted ; place the left foot in such a manner so that the left heel presses against the left side of the anal aperture. This securely done, cross the right leg over the left and see that the right knee is somewhat above and away from the left one. The right leg is to be so placed as to let the sole of the right foot be placed against the side of the left thigh. But this is not all. When the rigidity of the thighs disappears and the pelvic joints yield to the adjustment more and more, the right leg is to be so placed as to let the right heel be pressed against the left hip. Quite a difficult order for the novice, but no strains and aches will be there with persistent practice.

The first part of the Asana got through as above, turn your attention to the arms. Bend the left arm at the elbow and twist it up your back the left hand facing outwards. Now, lift your right arm straight up from the shoulder, bend the elbow and let the right forearm down on the back. A little stretching and effort will make both the hands meet and as they do so lock both the forefingers. Now straighten up the body and sit perfectly erect throughout the duration of the pose.

There is some pull, of course, on the accessory muscles especially of the lifted arm, and the twisted muscles of the arm which is under. But these muscles are soon very beneficially strengthened.

If you practice the pose like this the exercise will be one-sided, so change the position of the legs and the arms in another turn. Place the right leg under in the same manner as the placing of the left leg previously and cross it over with the left. Similarly as regards the arms : twist the right one upon the back and let the left arm come down from above to effect the finger-lock. The muscular pull on the left side of the trunk in this variation is more than on the right, if the right arm is used more occupationally.

Breathing is normal throughout the pose. The Asana is to be maintained for two minutes in the beginning and the duration increased judiciously and unhurriedly as you improve your condition.

Benefits

Gomukhasana is calculated to be a good remedy for rheumatism in the legs. It prevents and cures *sciatica*. It eradicates haemorrhoids. It successfully combats neuralgia in the legs, and also removes backache, muscular stiffness of the back and the effects of sprain in the forearms. It is also a remedy against indigestion and dyspepsia.

To remove stiffness and aches when the Asana is being learnt massage the legs and arms using either olive oil or talcum powder. I would prefer the former.

PADAHASTASANA

I have explained the Asana known as Paschimatana—the yogic posterior-stretching pose—in which one sits on the floor with the legs fully stretched out together and the trunk is so bent forward as to enable the exerciser to touch the knees with his face.

If that very posture is attained standing it becomes a different yogic exercise known as the Padahastasana, i.e., the feet and hands pose. The advantages of this exercise are almost similar to those of Paschimatana, but the additional ones are remarkable.

Padahastasana can be universally recognized in all schemes of free muscular exercises ; but there is this slight difference, apart from movements, that it maintains its yogic characteristics in smaller details.

The Method

Stand erect on the ground with chest well forward and the body slightly tensed. Raise the arms overhead and keep the elbows locked. Now bend forward at the waist keeping your head between the arms and the knees stiff. As your hands reach the ground take hold of the big toes. Wait a brief while at this stage to begin the next, which is important, as it characterizes the exercise as a yogic one. Keeping the first position, stretch your trunk a little further, bend the elbows and touch the knees or an adjacent upper part with your face. The elbows bend suitably to facilitate this last movement. This position is to be maintained as advised below.

Coaching the Muscles

This exercise is difficult of performance for those who are rather heavy around the waist and whose hamstring muscles at the back of the knees have never been used in such a position. The latter can be quickly coached to give in to the requirements of this exercise but a heavy waist or adiposity is an impediment which takes time to be got over. When such



COMUKHASANA.



PADAHASTASANA.

a condition is present it is advisable to do the exercise by stages until the final posture is reached in due course. Such persons, on bending over, should take hold of the ankle or an adjacent part instead of taking hold of the toes. In such a case the squeezing in of the trunk against the upper legs will also be difficult, but persevere and do so to whatever extent you can persuade the body to do it. The attempts will incidentally make the waist supple, reduce the waist girth, strengthen the abdominal muscles and stretch the hamstrings to enable you to attain the right posture.

At the start maintain the final position for ten seconds only, and gradually increase the time to the extent of three minutes. The exercise should not exceed three turns of three minutes each.

The cultural advantages of this exercise are many. It renders the spine supple, develops and strengthens the abdominal muscles, strengthens the hamstring muscles, and tones and strengthens the abdominal organs. The front abdominal muscles are vigorously exercised, which means that the inner organs function in a better manner. The nerves supplying the pelvic organs are toned up and there is a richer blood supply in the lumbo-sacral part of the spinal column.

Benefits

The benefits of Padahastasana are:—

1. It cures constipation and dyspepsia.
2. It prevents sciatica.
3. It cures adiposity.
4. It is claimed that it rectifies any shortening of the leg owing to the fracture of any bones, either in the lower leg or the thigh.
5. It is also claimed that it adds to the length of the legs when the bony frame of the body is young enough to grow.

CHAKRASANA : THE WHEEL

What is known as Chakrasana in Hathayoga is only a common display item in modern acrobatics, but in its latter aspect no therapeutical values are attached to it. While in the acrobatical "boneless" play the body of the performer is twisted into a complete circle in devious ways, Chakrasana, as can be seen from the accompanying illustration, is but a half-circle, more or less resembling a bow. I have already described Dhanurasana ; Chakrasana can be differently described as an inverted Dhanurasana.

Chakrasana again stresses the fact that the spinal column must be systematically treated to remain youthfully elastic and pliable. I have stated in these pages several times that a person is young physiologically in relation to the elasticity of his vertebral column. In normal life the movements of the backbone are occupational and restricted. We bend forward and move sideways, but even these movements do not work the spine fully as they are generally partial. The other important movements in which the spinal column can be worked into a backward arch has been completely eliminated, at least from adult life. In addition to this there are other causes which contribute to the dangerous stiffness of this very important bony structure of the body.

Chakrasana will be a real task for stiff-backed adults, but they have only to realize that the vertebral column is ever ready to be quickly coaxed into complete elasticity ; it responds to suitable exercise wonderfully, and the supporting muscles of the spine adjust themselves to new needs just as wonderfully. I know of no other system of physical culture which will so completely treat the spine in an unoccupational direction so vigorously as the particular Hathayoga exercises, of which Chakrasana is one.

The pose can be attained in two different ways. In one the body is lowered from above, and in the other, raised from below. The first is suitable for people whose spinal column and its accessory muscles have retained all their characteristic



CHAKRASANA, an exercise that tones up the spinal column.

tone and elasticity. This, however, is very difficult to others. The second method is easier, fool-proof, and does not entail the least risk of a tumble and a bump. It is meant for those who are stiff in the back in any degree. The novice, especially the middle-aged novice, will be well-advised to practise either method on a mattress to avoid being hurt by an unexpected tumble.

The First Method

Stand erect with feet conveniently apart, and raise the arms straight overhead with hands facing forward. Bend backwards slowly curving in the spine, and when the hands are on an approximate line with the hips bend your knees suitably to facilitate the backward movement of the trunk. This, of course, will help you to reach down to the floor with the hands. When this position is reached the knees can be straightened comparatively to increase the inward curve of the spine. This is certainly a difficult movement.

To get into the final position more safely the exercises can be done against a wall, to rest your hands, and you may gradually slide them down to the floor, or you may ask an attendant to hold your waist until you have struck the final position.

The Second Method

The second method is simpler. First, lie on your back on the floor. Draw in your legs till the heels are near to your hips and the feet flat on the ground. Simultaneously place your hands on either side of the head bending the arms at the elbows. Now raise the body slowly and let it go as far up as the spine will allow it to. There should be no jerk or undue strain. I recommend this method as one can work up methodically and gradually.

In the beginning some strain will be felt in the muscles of the legs, particularly in those in the upper parts of the thighs, but this will soon pass off as the muscles re-strengthen themselves. Massage the parts which are stiff after the exercise.

Rejuvenation

The exerciser with a stiff back should not attempt to come into the full spinal curve all at once; let that be attained gradually as the spine progressively adjusts itself to the

demands of the movement. A stage will soon be reached when he will be able to take hold of the ankles with his hands, which will indicate the complete reclamation and rejuvenation of the vertebral column.

Begin with fifteen seconds for each turn and do not exceed three of them. After two weeks increase by thirty seconds each turn till five minutes are reached in this progressive scale. I have stated the minimum time for reasons of caution.

Directly after this exercise is done one has a feeling of exhilaration. The blood courses all over the body and particularly in the spinal area. When a long turn of Sarvangasana gives one a cramped neck a turn of Chakrasana helps to do away with it. In that respect it acts as an adjunct to Sarvangasana.

As regards the benefits, Chakrasana stimulates the spinal nerves and renders them healthy. It will relieve constipation and dyspepsia and combat flatulence. It is expected to correct various forms of spinal curvature, pain in the back and lumbago. In the case of women it will correct various characteristic disorders. It is an antidote against obesity in both sexes. It adds to one's vitality and energy.



TRIKONASANA : The Triangle.

TRIKONASANA : THE TRIANGLE

When the final position is struck in this yogic exercise the body of the performer resembles a triangle, hence the name—Trikonasana. This exercise is also included in the scheme of Swedish drill and is quite familiar to schoolboys and girls. In the Swedish scheme, however, the exercise is regarded as important because it induces lateral movements of the spine, but in yoga the value is far beyond that limit, as we shall see presently.

To begin the exercise stand erect with the feet about twenty-four inches apart. Stretch your arms sideways on a level with the shoulders. This is the setting-up position for the exercise and you have to return to this in each repetition, and in changing from right to left and vice versa.

Without twisting the trunk in any manner bend slowly to the right till you touch the right foot with the right hand. The process will, of course, require a suitable bending of the right knee as in the accompanying illustration. And the outside leg will be completely stretched out inevitably to balance the movement on the right ; the heel of the outside foot will be lifted up from the ground.

With the bending at the right the left arm has to be moved up till it assumes the position as illustrated. The head also follows the movement and it is to be slightly inclined towards the right. Outside, the body—from the fingers to the toes—resembles an arc ; inside, it shows lateral bends.

Breathe in the normal way both when the posture is being assumed, and in the final position as well. Start with retaining the pose for a minute and increase progressively till three minutes are reached.

The same movements are to be repeated on the left side, and two movements—one on the right and one on the left—should be regarded as one complete turn. The total duration

of each turn will be double the time as advised above. Start with two turns and progressively reach six, which will be more than enough to fulfil the purpose of the exercise.

Trikonasana is an auxiliary to Ardha-Matsyendrasana and it also amplifies the effects of Matsyendrasana. It exercises the spine in a lateral direction as I have already stated.

It tones the spinal nerves and organs of the abdominal viscera, invigorates the peristaltic action of the bowels and increases appetite. It relieves constipation.

But the greatest claim that is made on its behalf is altogether different. It corrects the shortening of the legs due to the fracture of the thigh bone or the long bones below the knee. If persevered with, Trikonasana is calculated to strengthen the legs even when it has no fractured parts to strengthen.

UTKATASANA

The yogic pose known as Utkatasana has two variations. In the first there is hardly any great muscular effort ; all that is required is to employ a little idea of balance which can be mastered in a few minutes.

Stand erect with feet together and arms akimbo, that is with hands placed on the waist. Lower the body slowly until you reach the position illustrated on top on the previous page. You have to reach down to the height of the seat of a chair and no further. When that position is reached retain it for half-a-minute and then recover to the original standing position. The pose can be repeated for three turns, and the duration of each turn increased progressively. The trunk should be held erect as far as possible so long as the pose is maintained, and the recovery to the standing position ought to be slow.

Physical culturists and sportsmen who have trained the muscles of the legs and the hips ought to be able to do this Asana right away. Others will have to get a little outside help to get the idea of balance involved in the pose. The best that can be done is to sit on a chair with hands on the waist, trunk erect and feet together and then rise clear of the seat and ask somebody to take away the chair. When you rise from the chair contract the muscles of the thighs consciously to prevent a sudden banging down on the floor.

When the pose has been thoroughly mastered attention is to be given to further details. In the trial attempts the trunk and the lower legs tend to be in an exaggerated slanting position. By repeated efforts learn to hold both these parts of the body as erect as possible. And hold the thighs completely parallel to the ground. This is undoubtedly a difficult proposition but not one which cannot be brought under complete control by repeated practice.

A Variation

Then comes the other variation. From the first position now attained rise on the toes and slowly get down, finally to sit upon the heels. When this has been done you can keep the hands on the knees or waist as illustrated. The important point in this variation is to support the weight of the whole body on the toes as does a toe-dancer. This, of course, brings the muscles of the feet into vigorous play and persons with weak foot arches will certainly find the proposition difficult. So long as the feet are not strengthened by practice there will be a tendency—especially in fat people—to overbalance. In this variation of the pose, too, the trunk is to be held completely erect.

Practise the two variations separately and when both have been brought under control combine them into one movement, keeping well in mind and giving expression to the characteristics of the two different stages.

Practise the exercise for three turns and increase the duration of each progressively to suit your strength and endurance.

Utkatasana strengthens the accessory muscles of the legs and the hips. The second variety improves aching feet.

The value of Utkatasana is important. It is claimed that it cures lumbago and some other defects.

The second position has further use in Basti Kriya for internal cleaning.

As a pure physical culture method—apart from its curative aspect—it is useful as it works the legs and the hips in a new range beyond their sphere of occupational use.



UTKATASANA (trial position).



A variation of UTKATASANA.



JANUSIRASANA prepares the learner for harder exercises.

JANUSIRASANA: THE KNEE-AND-HEAD POSE

Janusirasana—the knee-head pose—is a variation which is easy and definitely prepares one for Paschimatana and Padahastasana. I have called the former a variation in relation to the latter Asanas but in the yogic scheme it is described as a main form with particular action on the human body. As the muscular mechanism of this exercise works in a smaller sphere a novice can master it in a little time and proceed on to the more difficult poses.

The Exercise

Sit on a level bed. Stretch the right leg forward and keep the knee straight. Bend the left leg at the knee and place the left heel on the perineum. One can place the left foot against the right thigh, but the other method is preferred, as it has a particular benefit to confer upon the exerciser. This completes the position of the legs.

Now take hold of the right foot with both hands bending over as much as possible for the purpose. Keep the head between the arms. The aim now should be to call in the aid of all the accessory muscles to let you touch the right knee with your face. Any stiffness in the spine and the sides, or an accumulation of fat in the middle region will, of course, prevent this final movement. Thinner people and people whose bodies are well-knit will not find Janusirasana very exacting; others will have to keep to it for some time to prepare their middle-line for the needs of this exercise. There is a little trick which will help one to reach the final position nicely. If you exhale while holding the foot with the hands and draw in the abdomen, as in Uddiyana, when you press the trunk down your face will easily touch the knee.

Retain the pose for five or six seconds to start with and hold your breath while the pose is maintained. Now repeat the pose with the other leg stretched out. Repeat three

times each way and increase the duration of each turn judiciously each week. One can do the exercise for ten minutes, of course the sum-total of all the turns.

When this stage is reached Paschimatana can be done with the least effort.

Although the muscular strain felt in the middle part of the body and the back of the leg is much less than that of Paschimatana it cannot be ignored. The accessory muscles have to be re-strengthened with repeated practice.

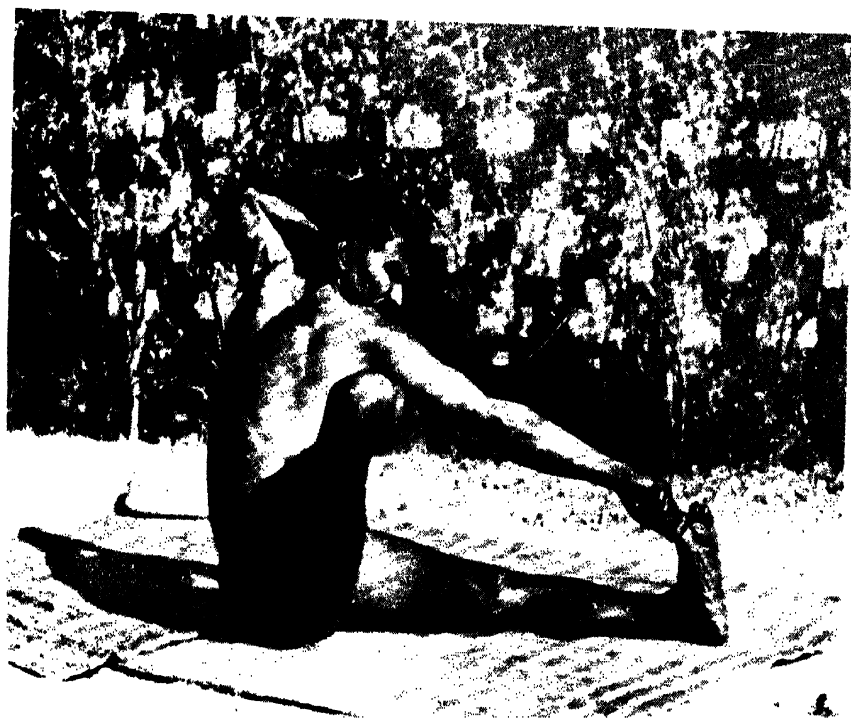
Benefits

A few turns of Janusirasana will eradicate any feeling of laziness and dullness. It will add to the general strength and tone of the body. It will make the body, and particularly the lumbar region of the spine, supple. It will strengthen the muscles of the back of the legs and exercise a prophylactic effect upon the nerves, particularly the sciatic nerve.

It will stimulate the organs of the abdominal viscera. It will promote peristalsis. It is a fair remedy against corpulence and congestion of the liver and the spleen. It will help in eradicating piles and lumbago. It will promote the health of the prostate and the bladder. It will prevent the recurrence of sciatica.



AKARSHANA DHANURASANA, front and back views.



AKARSHANA DHANURASANA: PULLING THE BOW

See Dhanurasana. In this exercise the student lies on his chest, folds his legs on the back and pulls them with the hands. The body is thus arched inwards and is said to resemble a bow.

This famous exercise has a variation which is performed sitting. This variation is known as Akarshana Dhanurasana. If the main Asana is like a bow, in the variation a position is assumed in which a pull on the string of the bow is imitated. Some authorities have laid down that the therapeutic effects of the variation are more intensive than the main pose.

The Method

The exercise is not so simple as it appears to be from the accompanying illustration. Some practice is necessary to master the pose. Sit on a level surface with one leg fully stretched out and the knee stiff. Fold the other leg in such a manner against the body that the upper part of the thigh is pressed against the trunk and the lower leg is placed securely under the pit of the arm corresponding with the raised leg. As soon as this is done stretch out the arm thus securing the leg and take hold of the foot of the other outstretched leg. This is done by inclining the body forwards to the required extent.

This forms the complicated part of the exercise. One arm is still free. Hold the toe of the upraised foot with the free hand, raise the elbow upward and backward keeping the trunk as erect as possible.

If you have raised the right knee, as in the picture, the right arm is holding the knee in position and pulling the outstretched, i.e., the left leg simultaneously. The left hand is employed in holding the right foot. All this looks quite easy but when the muscles of the body are not used to responding

to the demands of this unoccupational or extraordinary position there will be a lot of trouble in holding the upraised leg in the required posture. But insistent practice will ultimately overcome all difficulties and the muscles and joints will become marvellously pliable.

The same thing is to be repeated on the other side of the body. The right leg should be stretched out, the left leg raised under the left arm and the right arm should be pulling the string of this mimic bow.

Do nothing in a hurry ; get into the posture with as little strain as possible and with no jerks at all. This is important. Having assumed the pose on any one side retain it for a few seconds in the beginning. Give the other side exactly the same amount of time. And when you are quite used to this pose and there is no resistance on the part of the muscles and the joints involved in the action, increase the duration of the exercise judiciously. The ultimate limit reached should be about six minutes on each side of the body.

In holding the body thus fantastically the student is liable to feel some tension all over the body. Make this tension uniform. Breathing should be normal.

Benefits

The benefits claimed on behalf of this significant exercise are many. Akarshana Dhanurasana will relieve chronic constipation, first of all ; it will also combat dyspepsia and sluggishness of the liver. The greatest claim, however, is that it will remove defects in the spine. It will eradicate rheumatism of the legs, knee-joints and the arms.

It tends to remove fat from the middle part of the body, which is quite obvious from the mechanism of the exercise. It gives one's digestive powers a new energy. It re-establishes and invigorates peristalsis, improves appetite and removes congestion in the organs of the abdominal viscera, and it tones these organs also.

For giving one vigour, "pep" and vitality Dhanurasana and its variation have few equivalents.



VRISCHIKASANA, a spectacular exercise easy for adepts at SIRSASANA.

VRISCHIKASANA : THE SCORPION

Only an advanced gymnast can do a long arm balance and its variation known as the Tiger Bend, and only a careful Yoga student will do the Sirsasana, the yogic head-stand. The postures are almost alike but there are slight differences in detail and in the purpose of the variations. Either of these, and especially the Tiger Bend, should form the basis of the yogic posture known as Vrischikasana or the Scorpion pose but for a different end. Just as a scorpion has its tail curved up, in this spectacular pose the yogic student assumes a position to enable him to draw up his legs according to the accompanying illustration.

Gymnastic practice or the mastery of Sirsasana will make the Scorpion easy of performance. An adept at either of these has only to place himself in the required posture, to which he can adjust himself very easily, but a novice will have to take some trouble in learning it, which, however, is not very difficult if he will stick to it for a while.

The best thing to do is to ask a friend to help you get the necessary balance, or you can do it before a wall.

The Method

Place your forearms on the floor shoulders-width apart about two feet away from the wall. Keep the palms down. Push against the floor lightly with one leg and heave the body up. A few attempts will see your feet against the wall. Undoubtedly there will be some muscular strain but it will soon disappear into the normal movement when the exercise is well under control. As you make your feet leave the support of the wall to give you increasingly the idea of balancing, your respiration and the working of the accessory muscles will get adjusted quickly. They will soon cease to put any impediment in your way.

When you have thus learnt to balance yourself well, move away from the wall and take some clear space for the exercise. Come up to the inverted position with your

forearms on the floor. Then slowly lower the legs towards the head so that your feet touch the top of your head. Many adepts place the feet on the head, and it is very desirable to do so. This, however, is not so easy, nor is it so quickly done as it reads.

The main factor in the latter part of the exercise, that is, the lowering of the legs, is the condition of your vertebral column; if it is naturally quite elastic it will curve in easily according to the demands of the pose; if it is stiff, some more time has to be spent and the pose done only partially till the spine is made pliable. It will need some patience and a lot of perseverance.

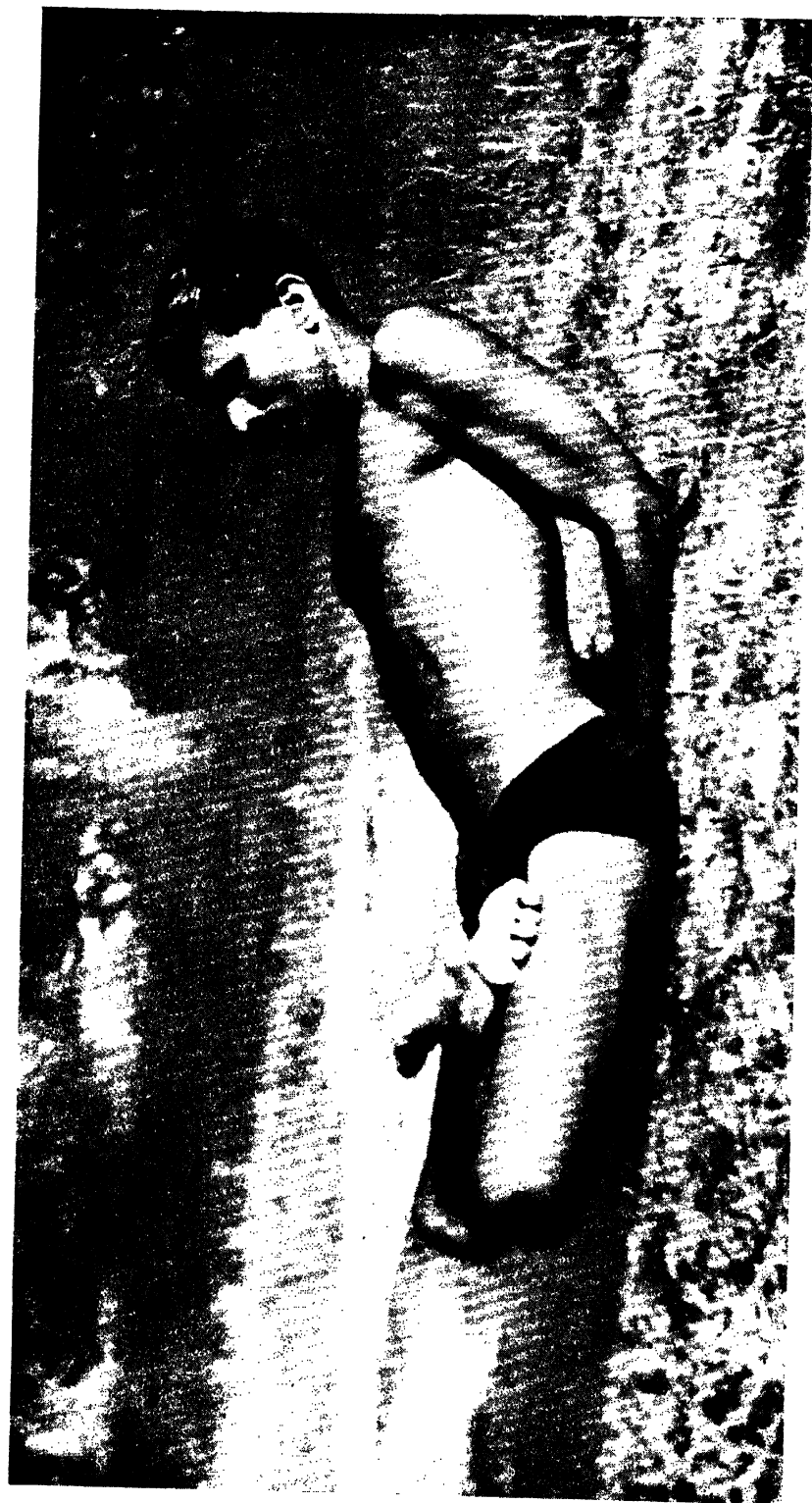
But if the student has done enough Bhujang- and Dhanurasanas, which involve the inward curving of the spinal column, this second part of the Scorpion should come easily.

Benefits

Vrischikasana increases muscular efficiency and power to a wonderful degree; it makes the spinal column pliable, therefore vigorously youthful; it gives the whole body a great amount of elasticity. In fact, the exercise is unequalled for making the body very supple.

The effect on the inner organs is even greater; it combines the benefits of Sirs-, Chakra- and Dhanurasanas. The outstanding benefits can be enumerated as under ;

1. It promotes a vigorous blood supply.
2. It strengthens the nervous system, particularly the spinal nerves.
3. It cures constipation and dyspepsia.
4. It removes congestion in the liver and the spleen.
5. It prevents and cures many gastro-intestinal troubles.
6. It removes rheumatic pains in the arms and the legs.
7. It reduces fat, particularly in the middle region.
8. It energises digestion.
9. It invigorates peristalsis.
10. It removes flatulence.



TOLANGULASANA or THE WEIGHING SCALE, before effecting the chin-lock.

TOLANGULASANA : THE WEIGHING SCALE

If the yogic student will get into the position illustrated and explained below, he will, according to the yogic text, resemble a weighing scale. Tolangulasana is but the Sanskrit name given to this particular posture.

The pose is by no means as difficult as it appears to be. The advanced student can learn it at the first attempt because he has made his limbs and spinal column quite elastic. The novice can learn it very soon ; even his stiff body will hardly be any impediment. This posture is much less exacting than many others which have been described.

As much of the weight of the body in the final stage is thrown on the supporting forearms, it will be advisable to spread upon the ground a folded blanket to avoid hurting the elbow.

Technique

Sit down and effect the foot-lock known as the Lotus. Fold the legs and put one over the other so that the heel of the right foot is placed against the left groin and the heel of the other foot against the right groin. This is all, so far as the Lotus is concerned. People with bulky thighs and comparatively immobile knee-joints will, of course, find this difficult, but it can be mastered very quickly in a few days. There will be aching muscles in the legs, but repeated attempts at the exercise and a little massaging in the parts will do away with the ache.

Having assumed the Lotus, lie down on your back as you do in the Fish or Matsyasana. This can be done with the least strain if you lift up the leg-lock to avoid the resistance offered by the abdominal muscles. Now when you are thus reclining, lower the leg-lock to the ground.

The next thing to do is to place your hands under the middle part of the hips. The palms should be upwards. The forearms are now placed on the ground as strong levers.

One of my text books says that the student should now inhale and raise the upper part of the body and the Lotus, simultaneously throwing the weight on the forearms and that portion of the body which inevitably lies on the ground. I disagree so far as the inhalation is concerned because it is mechanically wrong. The raising of the body calls for a vigorous contraction of the abdominal muscles. As male breathing is largely abdominal, and as this particular posture makes the breathing abdominal even in women, it is not possible to contract the abdominal muscles in the desirable manner. I find it helpful to exhale as I contract the abdomen and raise the body as required by the pose. And when the pose is struck it does not matter if one breathes in, to eliminate for a moment the first feeling of tension. But finally, the pose requires holding the breath as long as one can comfortably do so.

When this part of the posture is held, effect the chin-lock known technically as Jalandhara Bandha. Place the chin against the jugular notch in front of the neck.

Retain the posture for a minute to begin with and progressively but quite slowly increase the duration, which I should limit at ten minutes. The posture is to be effected without straining and with the minimum of jerking—very valuable points to remember. The body in this position can be gently rocked to justify the name of the Asana and to intensify, particularly, the abdominal tension.

Benefits

The Lotus or Padmasana by itself is beneficial in that it improves digestion, removes rheumatism in the legs and strengthens the nerves of the legs. Tolangulasana augments these benefits as it removes flatulence, strengthens the vertebral column and stimulates the spinal nerves. The abdominal tension pushes down all faecal matter to the end of the passage of the colon, which is incidentally toned and strengthened. It is claimed that the Scale will cure the much too common orthopaedic defect known as pigeon chest, and in time will strengthen and enlarge the rib-box. The muscles and the nerves of the arms are largely benefited as the pose forces a large supply of blood into them.

FOOD AND FASTING IN YOGIC CULTURE

It is an age-old notion that the practice of yogic exercise is a particular form of training in asceticism. The prevalent ideas are that (1) the yogic exerciser must lead a celibate life ; (2) he must take to fasting frequently ; and (3) the food he eats must be very restricted. Hathayoga is certainly the first step towards a spiritual life, but it has nothing to do with asceticism, if fasting and restriction of food are integral parts of an ascetic practice.

From the religious point of view fasting is as much a medieval Hindu practice as it is Hebrew, Christian or Moslem. In the present-day world where the influence of religion has waned considerably, fasting is used as a cleanser and a remover of mental cobwebs. As such it is supported to some extent by modern medical science. But the original exponents of Hathayoga condemn fasting in no vague manner. They even go to the extent of saying that fasting is inimical to bodily health. And self-inflicted pain, which is supposed to be an ascetic virtue, has also been severely condemned.

Fasting

The diet of a yoga culturist, though it is strictly a meatless one, is so very well planned that it makes fasting quite unnecessary. My personal experience of about twenty-five years of vigorous athletics and a decade of yogic culture is that fasting is often necessary in the former and totally uncalled for in the latter.

In my days of intensive muscular and strength culture it was almost a rule to skip a meal every now and then and fast for twenty-four hours every fortnight. More than once I have been compelled to fast for three days at a stretch, because such training forced on me an excessive intake of a large

variety of food. But since I took to this other form of health culture I have not even skipped a meal, though it must be admitted there has been a radical change in the kind and quantity of my food.

How far Hathayoga is removed from the practice of asceticism is made clear in "Gheranda Samhita," one of our great source books in Sanskrit. It condemns over-exertion, and it says that the yogic student "should avoid early (morning before sunrise) baths, fasting or anything giving pain to the body ; so also is prohibited to him eating only once a day or not eating at all. But he may remain without food for three hours." (G. S. Lesson V. 31).

The above allays one grave doubt. Let us see what the text books have to say about diet.

Diet In Yoga

The primary injunction about a yoga student's food is that it must be light, easily digestible and non-stimulant. "Half his stomach is to be filled with food, one quarter with water and one quarter should be kept empty for practising Pranayama." Everyone will admit, Pranayama or no Pranayama, that it is an excellent rule for bodily hygiene and modern medical science has no fault to find with it.

Yoga enjoins strict moderation in diet but it is difficult to understand why the schedule of food articles given in "Gheranda Samhita" should be a Bengali one. Of course, we have nothing to do with it as our main concern is with the principle.

The staple food recommended consists of rice, barley, wheaten bread and pulses. Of vegetables many are mentioned and stress is particularly laid upon the leafy ones. Fruit is to be consumed in abundance.

The student is asked to avoid "bitter, acid, salt and roasted things, curds, whey, heavy vegetables, wines, etc., also putrid, very hot or very stale and exciting and sinful foods !" I believe the last mentioned indicates meat. In sum, the food that the yoga student should eat must be easily digestible, agreeable and cooling "to nourish the humours of the body."

There is much in the source book about food and other things which need not be mentioned as they do not apply to modern life.

Value Of Milk

The great value of milk was fully realized even in that night of time when yoga was discovered. No modern student of yoga can do without his daily pint of milk ; it must form an important part of his food.

There are certain specific ailments for the cure of which milk supplements certain yogic exercises. These exercises have a strange effect upon the human nervous system, and milk proves a great aid in its regeneration.

Now we arrive at the crossways. Admitting that yogic culture is ancient and is a step towards spiritual life, one has also to admit that it is no longer the private property of spiritual culturists ; there are others, both Indian and European, who seek the help of this culture with the "base" aim of maintaining good health and curing those ailments yoga claims to cure, and who do not desire to advance any further on the spiritual side. Are they also to submit themselves to the strict regimen of the spiritual aspirant ?

Experiments have shown that the use of modern foods does not in any manner hamper progress in health sought the yogic way particularly where moderation and rationality in eating is observed. That law of good health has been immutable at all times.

Meat Consumption

The great question of eating meat arises. To my mind the use of meat in moderation does not do any harm while youth lasts, and while there are games to help in addition to yogic exercise. But when metabolism weakens naturally it is advisable to give up meat, at least red meat. This tends to add to one's health and power. But I have found that the use of fresh white meat on occasions does not do the least harm or interfere with one's physiological balance as red meat would. Double-cooked food and fried foods are certainly injurious, yoga or no yoga.

I repeat, I would insist upon the use of milk when yogic culture is adopted, as without it the fullest benefit of yoga cannot be had. This is from my personal experience. From the same I may further observe that eggs greatly increase the efficacy of milk.

Should the modern man be a celibate in the pursuit of yoga? Well, moderation is an excellent rule both in yogic and athletic training.

EMOTIONAL BACKGROUND OF HEALTH AND YOGIC CULTURE

A human being, says the psychologist, is not a continuing personality; he is a series of separate psychological momentary men. Similarly, life or time is not a continuous flow, but a series of separate, successive, instantaneous moments. Health, as a specific physiological and psychological condition of the human being, is, similarly, no constant state but is a variable, ruled as it is by so many conditions. The bodily processes have a natural tendency to harmonise themselves and when things are congenial to aid this harmony good health is easy to obtain.

Aims of Health Culture

It is quite a common thing to note that physical culture, sport and athletics are, in general, youthful pastimes; that is to say, they possess the mind of man when he is yet remote from social responsibilities and social stimuli,—a condition which seems important for the physical and mental development of the young man. Health as a by-product of this determining stage of life can be quickly assured even where there is no conscious effort to get it with the help of organised methods, because as yet the young man is free from any great interference by his emotions. Some of these emotions can be described as highly destructive and some as benevolent.

The greatest aim of health culture is the conservation of nervous energy. Scientifically that mode of it is of adequate value which progressively vitalises the nervous system. This energy forms the reserve power to help us fight our battles efficiently all through life. To a certain extent this reserve power can resist the stress of corrosive emotions, but if these be chronic and unrelenting, the reserve power fails and the nervous system and the ductless glands degenerate. This degeneration soon spreads into the whole organism.

Antagonistic Play of Emotions

Unfortunately modern methods of health culture teach us nothing to guard against or to negotiate an emotional chaos. The practice of mental hygiene is regarded as totally separate from these methods. So, quite the most valuable and energetic part of life—youth—is lost, which should be better spent in equipping ourselves against the antagonistic play of emotions which increases as our social and other burdens increase.

What are the most corrosive emotions? They are,—fear, anxiety and anger. If worry can be dealt with separately, I should like to describe it as a synthesis of fear, anxiety, despair, sense of futility and a number of other allied psychological conditions. All are the results of social stimuli which ultimately and absolutely determine the condition of a man's bodily processes. There are heroes among men who are equipped properly to overcome physical fear and render a good account of themselves when it is present, but that man is yet to be born who can overcome social fear, which, once it gains root in a mind, expands like an expanding bullet into a chronic state and corrodes till it claims its victim. This may be seen in a very large percentage of suffering mankind who seek medical aid almost ineffectually.

Genesis of Emotions

Psychologists differ about the genesis of emotions. But it is a common conclusion that specific physiological changes accompany all emotional stresses. These begin, as we have already observed, with the nervous system and spread to other parts of our organism, affecting them in a degree according to the strength of the emotional disturbance.

Disturbance of the nervous system results in the degeneration of the ductless glands. Dr. Sajous and others have proved that the soundness of the different vegetative functions depends mainly on these ductless glands ; and that if their internal secretions suffer, premature old age and even premature death may follow. Ductless glands are considered as a central regulating system similar to that of the nervous system.

The Ductless Glands

The important ductless glands in the body are the thyroid, pituitary, adrenals and the sexual glands. The effect of emotions on the adrenals is to produce elevated blood pressure which

favours the development of arterio-sclerosis and other diseases of the circulatory system. The thyroid is affected by mental depression which causes myxoedema. The degeneration of the pituitary body caused by emotions leads to acromegaly. Jaundice is also of emotional causation indicating the degeneration of the liver. The effect of fear and anger upon the heart is quite common knowledge. Depressing emotions also promote inactivity of the intestines. Diabetes is also caused by fear and anxiety.

We have seen that acute emotions have an influence on the body functions. Normally, these changes in the body as reactions to acute emotions are of a passing nature. After the emotion disappears the corresponding physiological processes, weeping or laughing or heart palpitation, or elevation of the blood pressure, also disappear and the body again returns to its equilibrium.

Source of Chronic Disorders

One of the most important discoveries of Freud was that whenever emotions cannot be expressed and relieved through normal channels through voluntary activity they may become the source of chronic psychic or physical disorders.

"Studies of peptic ulcers," says Dr. Franz Alexander, "brought weighty evidence for the assumption that emotional conflicts of long duration may lead as a first step to a stomach neurosis which in time may result in an ulcer. There are also indications that emotional conflicts of another kind may cause continued fluctuations of the blood pressure which constitutes an over-taxation of the vascular system. This functional phase of fluctuating blood pressure in time may cause organic changes in the circulatory system.

"These disorders develop in two phases. The first phase consists of functional disturbance of an organ, caused by a chronic emotional disturbance. In the second phase, the chronic functional disturbance leads in time gradually to irreversible tissue changes, to an organic disease.

"All those emotional conflicts which psycho-analysis has recognised as the ultimate cause of certain functional and organic disorders arise during our daily life. Continuous fears, aggression, wishes, if repressed, result in permanent chronic emotional tensions, which disturb the functions of the organs

not under conscious nervous control. Many emotions due to the complications of our social life cannot be freely expressed and relieved, but remain repressed and then are diverted into wrong channels. They influence the internal functions, such as digestion, respiration or circulation."

Effect of Fear and Anxiety

Like "inferiority complex" the Freudian labels, anxiety-neurosis and fear-neurosis, are now much used among the educated. Freud has described neurasthenia as purely the outcome of fear. His theory of war-neurosis was in part forestalled during the Franco-Prussian War in 1870 when cases of sudden attack of diabetes among the French soldiery due to excessive fear and anxiety were recorded.

Violence of emotions, whether benevolent or corrosive, have caused many sudden deaths. Mrs. Rip Van Winkle burst a blood vessel in a fit of violent anger. Sophocles died suddenly of violent joy. Ardent lovers are for the time in a state of heightened blood pressure. Even this happy state has caused sudden deaths as recorded by Forel, Havelock Ellis and others.

Utility of Yogic Asanas

Thousands of years ago yogic investigators anticipated that humanity would be in this horrible mess. If they discovered the Asanas for bodily health they warned us that the Asanas would be worse than useless where emotional disturbance was present. The yogic student was enjoined to effect mental hygiene as a special and a very necessary preliminary to the practice of the mechanical Asanas. Thus mental hygiene became an inseparable part of yogic culture.

These processes of mental hygiene are known, let us repeat, as "Yamas" and "Niyamas," which are calculated to bring harmony and peace to the follower of this cult. The terms of "Yama" (control) are: "Inoffensiveness, truthfulness, non-stealing, continence and non-receiving." The terms of "Niyamas" are: "Purification, contentment, mortification, study and resignation to the Lord." Many commentators have, however, given especial importance to contentment, like our modern practical philosophers, for contentment is the core of all advancement and peace, and through it alone one can avoid the conflict which rages everywhere in the world.

YOGIC EXERCISES FOR GAINING HEIGHT

Good stature is undoubtedly a very important thing in life. Apart from adding to one's personality it is now, among others, a specific condition of appointment to many important services. Hundreds of young men have asked me if stature can be improved upon artificially.

Artificial methods can, under favourable circumstances, bring about quite marked changes, but these are not infallible because a man's stature is determined by so many things. The methods do, however, succeed to a large extent, but a small Gurkha, for instance, cannot hope to attain the proportions of a gigantic Pathan.

The reason for this is the fact that a man primarily attains his height according to his family standard ; exercise, alimentation, regional influences, etc., may help him to exceed that standard to a certain extent. It is an accepted truth, however, that although the family standard can be exceeded, no influence whatsoever will cause a man to exceed the standard of his race. This is the general rule, and does not apply to those who may be accepted as freaks of nature, or who depart from these standards on account of some complex and inexplicable causes of atavism.

Height concerns itself with a man's bones and cartilages. The statement of some physiological facts is therefore necessary. I quote the following lines from Kuvalayananda :—

"Bones, like all other tissues, are composed of cells, penetrated by nerves and blood vessels, are very plastic both to the normal forces of growth and to external influences, and are subject to many diseases. They are completely covered by a dense fibrous coating called periosteum, which is richly supplied with blood, and plays a leading part in the growth of bones. The cavity side of the bones is also lined with a similar membrane called endosteum also rich in blood vessels.

"The bones of the lower extremity and the vertebral column are mainly responsible for a man's height. The vertebral column is composed originally of thirty-two separate pieces, each piece being called a vertebra. In the adult state the separate pieces number only twenty-six, several having become fused together. The separate pieces are arranged one on the top of the other, cushions of gristle, called cartilages, being interposed between each, which also help to unite them, while the union is completed by partially movable joints and by strong fibrous bands called ligaments.

"Human height is principally determined by the longitudinal growth of the skeleton. Though this type of growth depends upon the general growth of bones it makes clear those yogic exercises which directly bear upon their longitudinal development.

"According to Meyer's law, there are two agencies that largely influence the growth of the human skeleton: Pressure and Tension. The natural working of this law can be seen in the vertebral column. The length of each vertebra in child and man is found to increase steadily downward from the second cervical to the fifth lumbar. Reckoning the body-weight as nearly two pounds per inch each vertebra would have less weight to sustain than the one below and more than the one above it. This increase is clearly due to the stimulus of increased pressure. Possibly the same law explains the relatively smaller longitudinal growth of the skull which bears no pressure in the skeleton; and the proportionately longer lengthwise development of the lower extremities which have to bear the whole body-weight."

The yogic exercises recommended for increasing the height are : (1) Sirsasana ; (2) Vrikshasana ; (3) Uddiyana ; (4) Nauli ; (5) Halasana ; (6) Bhujangasana ; (7) Paschimatanasana.

Sirsasana

Kneel on the ground. Having interlocked the fingers place the forearms on the ground which make an angle. Now place the top of the head at the apex of this angle so that the interlocked hands are close to the back

of the head. By degrees, erect the trunk and then raise the legs straight upwards. The body should be one straight line from the head to the feet. The pose can be maintained from thirty seconds to twenty minutes.

In this inverted pose the skull, which normally has no weight to support, is made to bear the burden of the whole body and thus receive a large pressure stimulus. The different vertebrae of the spinal column are inversely burdened, and so those, which in the erect position receive a weak pressure stimulus, get a proportionately stronger one.

Vrikshasana

Stand erect on the left leg. Bend the right leg and place the right foot at the root of the left thigh. This is known as Vrikshasana or the Tree pose. The weight of the body is thrown on one leg and the lower extremities receive additional pressure stimulus.

Uddiyana

Stand with the legs apart and the seat somewhat lowered. Place the hands on the thighs. Now exhale completely. Draw in the abdomen which will raise the diaphragm upwards and press the organs of the abdominal viscera against the back. This movement will give the abdomen a concave appearance.

This external muscular effort, according to an important source book, pulls the diaphragm into an extreme convex position on the thoracic side. Thus all the external and internal muscles which hold the backbone in its place exert a steady upward pull to its bony parts which are stimulated by this pressure.

Nauli (Abdominal Isolation)

When the Uddiyana is being maintained a steady downward push and simultaneously a forward thrust will cause the straight muscles of the belly to be isolated. There is a central isolation, as well as in the right and left sides. Uddiyana and Nauli can be practised alternately. Nauli exercises a downward pressure on the vertebral column and stimulates

it. By alternating these exercises the student can exert a strong stimulus on the vertebral bones and this helps in their longitudinal growth.

Halasana

Lie on your back with the body fully stretched. Raise the legs together and let them go backwards till the toes touch the ground beyond the head. Then push the toes further up as far as they will go. Place the arms around the head. The pose can be maintained from a minute to ten minutes. This pose like Bhujangasana stretches every vertebra posteriorly as well as anteriorly and thus helps in their development.

Bhujangasana

Lie face downwards on the ground. Place the hands on the ground near the shoulders. Now raise the head backwards as far as it will go to curve the cervical portion of the spinal column. Slowly raise the trunk till the whole of it is resting on the leverage of the arms. The body, from the navel to the toes, should be on the ground. Maintain the pose for a few seconds and then lower the body to the original position. Repeat several times. Its effect on the spinal column has been mentioned above.

Paschimatanasana

Sit on the ground and stretch the legs stiff like a stick. The heels should not touch each other. Catch hold of the big toes with your fingers and place your forehead on the knees. This pose should not be maintained for more than three minutes unless it is combined with Uddiyana.

This, in brief, is the yogic course for increasing height. Technical explanations are elsewhere given. Provided one has youth, and determination enough to persevere for a reasonably long time benefits will be easily derived. Of all the problems of physical development artificial height increase is the most difficult.

A SHORT YOGIC COURSE FOR WOMEN

Henry Havelock Ellis and several other authoritative observers like him have described woman as a permanent invalid. A woman is much more liable than man to deviate from a normal standard of health as she is very delicately made, has to carry out her enormous biological responsibilities, and has to pass through two great physical and psychical upheavals in her life—once during puberty, and once again during her climacteric.

Her life has, therefore, to be reviewed from a negative aspect to make clear the great risks she has to face. The majority of women are victims of these, and only a fortunate and sensible few effect a smooth passage through them. It is a truth to state that a man gets into the ways of good health rather naturally and normally ; but for a woman to do so is a matter of very conscious endeavour indeed, because she is up against many natural difficulties.

A woman is supposed to mature fully and begin to enjoy dynamic youth from the age of twenty but the passage to that stage of life is by no means uneventful. Take the first upheaval of puberty. Only those girls go through it in a comparatively normal manner whose upbringing has been very intelligent and careful, but the majority of them stumble and get bruised. Pubertal anomalies are many, and each of them seems to be intimately related with the other. The very first and the root of these disturbances is the periodic function which struggles immensely to establish itself, and as it struggles it saps the vitality of the young girl, bringing as it does in its trail other difficulties of a grave nature.

In her heritage of maladies woman surpasses man because she is liable to suffer, in addition to the common lot of them, from some characteristically female ones. We have just mentioned one of them. The others are digestive disturbances, obstinate pubertal constipation, pubertal tonsillitis,

ovarian insufficiency, endocrine imbalance, goitre, i.e., disorganization of the thyroid on account of exclusively feminine causes, nervous troubles, palpitation of the heart, pubertal eczema, and that disease of pubertal development known as chlorosis. We have not here mentioned the other supplementary and comparatively minor ailments. The above make the mountainous trouble that a growing girl is expected to get over.

First Strain

This first strain saps the vitality of many and causes their death. They that have passed through and established some sort of good health have by no means finished with it because in the married state many troubles tend to reappear in those whom the first strain has not taught to be on the alert. Re-adjustment in the married state may cause some minor disruptions but generally it promises good buoyant health on account of the general increase of glandular activity. But sufferings reappear with the coming of the child, and when it has arrived, the new mother once again has her digestive and the characteristic functions disorganized, there is a recurrence of chlorosis provided she had suffered from it before ; she invites nervous troubles, and perhaps entertains varicosity as a permanent guest. In Indian homes at least this ordeal is regarded with great suspicion, because it liberates, more often than not, the germs of tuberculosis which take a heavy toll of our young mothers each year. The coming of each child means a repetition of the ordeal, which utterly demands that as the children are spaced the young mother be thoroughly revitalised.

This is not, however, the end. There is the cataclysm of the climacteric scheduled to interfere seriously with the career of the woman anywhere between the ages of 35 and 55, but generally appearing between 45 and 50, provided the life before has been passed in good health. Volumes have been written about this very important change in a woman's life. Normally it indicates the cessation of her biological purpose, but the cessation hardly occurs without causing disturbances. Many sufferings of puberty tend to reappear ; this is at least very true of chlorosis if it has occurred before.

The educated city woman with an interest in life in general has, however, escaped one great danger once considered a characteristic of the climacteric, and the danger is of insanity. Abercrombie, the well-known psychologist, said that this kind of insanity occurred especially in uneducated village women, but women of education, particularly with a dynamic interest in life, totally escaped it. Yet this characteristic mental derangement is by no means rare among middle-aged women, as is well-known to the medical profession. Abercrombie further said that this disease tends to disappear of itself in about three years ; if it does not, it tends to stay permanently, killing totally the happiness of a home.

All the above lends enormous strength to the argument that a woman, infinitely more than a man, should be attentive to her health, particularly considering the fact that she is the centre of the family and on her health and cheer depends the amount of sunshine that illuminates and cheers the home. Considering characteristic feminine maladies, no way of health could be better than Hathayoga. As a system for women it is a system par excellence. It tends to cure all the above mentioned ailments, offers protection against them and many others, and smooths out the risks of the climacteric.

The undermentioned short course is recommended :

	Min.	Max.	Increase per week.
1. Sarvangasana	30 secs.	20 mins.	1 min.
2. Matsyasana	30 secs.	3 mins.	15 secs.
3. Halasana	30 secs.	10 mins.	1 min.
4. Bhujangasana	10 secs. (3 turns)	1 min. each (7 turns)	10 secs. 1 turn (each fortnight)
5. Salabhasana	do.	30 secs. (7 turns)	5 secs. 1 turn (each fortnight)
6. Paschimatana	30 secs.	3 mins.	15 secs.
7. Gomukhasana	30 secs. (2 turns)	5 mins. (2 turns)	30 secs.
8. Uddiyana	10 secs. (3 turns)	30 secs. (5 turns)	30 secs.
9. Nauli (central)	do.	do.	do.
10. Shavasana	20 mins.		as desired.

Restrictions

This course can be begun by girls from twelve years. But it should be borne particularly in mind that the last two exercises, Uddiyana and Nauli, are not available to girls until the pubertal function is safely established, for which no time limit can be indicated. The same restriction about these two exercises holds true about women over forty, but they can do them if guided by an expert. This excellent course is available throughout life.

Lest the fair reader should be frightened at such a tall order, let me say at once that to prevent the feeling of slavery she should lay off exercising now and then. This laying-off is a fine art in physical culture very rarely understood by the common run of health enthusiasts. To prevent monotony take the laying-off as a liberty, but never as a licence. When there is a superb feeling of health and vitality caused by the course, and you realise that you are perfectly tuned, lay off for a week or even a fortnight, but keep to the other conditions mentioned below quite strictly. This laying-off will certainly increase your enjoyment of life, but do not stretch it too far, recommence before the "below par" feeling gets you, and as you feel you have begun to lose your "pep". Health is variable, and set-backs are so frequent.

The best time to do these exercises is the afternoon. The environment should be quiet and the atmosphere pure. But if you should so care you can choose your own time as you must not sacrifice your games, which must be added to this health scheme for larger benefits. Uddiyana and Nauli are done while the stomach is empty ; they should be done in the morning to help evacuation.

Now to the more important part of the scheme. Hatha-yoga has a tendency to effect slimming if it is unaccompanied by games and some muscular exercises. And it demands more nutrition, particularly that protective nutrition supplied largely by milk, butter and raw or half-boiled eggs. I should make the use of this course absolutely dependent upon protective nutrition. Where malnutrition is the master and is likely to continue as such, Hathayoga will cause emaciation, buzzing in the ears, dizziness and perhaps palpitation of the heart.

It is sheer hypocrisy to preach health to the underfed, and those below the poverty line. I have not mixed up the two classes because the former is found in well-to-do homes as well, be the homes English or Indian. It was appalling to read in "Britain's Health" that even in a family with an income of £ 1,000 a year there is some malnutrition. The case of the Indian woman is harder; she may go about with ten thousand rupees worth of jewellery on her but in general she goes about without adequate protective foods. This class can, of course, be reclaimed, but the other cannot. So this physical culture protection is offered, alas ! only to women who get enough of the right kind of food.

This course is an excellent preparation for marriage and motherhood. But it is not available to the prospective mother. It can, however, be resumed in the fifth week after confinement provided it has been normal.

SCHEDULE OF EXERCISES FOR MEN

	Min.	Max.
1. Sirsasana	1 min.	8 mins.
2. Sarvangasana	1 min.	8 mins.
3. Matsyasana	20 secs.	2½ mins.
4. Halasana	1 min.	6 mins.
5. Bhujangasana	10 secs. (3 turns)	(7 turns)
6. Salabhasana	do.	do.
7. Paschimatana	30 secs.	3 mins.
8. Ardha-Matsyendrasana	1 min.	3 mins.
9. Yoga-Mudra	1 min.	5 mins.
10. Uddiyana	(3 turns)	(7 turns)
11. Nauli	do.	do.
12. Shavasana	20 mins.	as desired

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